Accredited Laboratories, Inc.
Foot of Pershing Avenue, P.O. Box 369
Carteret, New Jersey 07008-0369
Telephone: (908) 541-2025

ANALYTICAL DATA REPORT

for

Guardian Environmental Services
1280 Porter Road
Bear, Delaware 19701

Project: NL/Dutch Boy

ACCREDITED LABORATORIES CASE No.: 2927
DATE RECEIVED: 4/13/93

Field ID	Laboratory Sample #
NL-5A	9302527
NL-6	9302528
NL-7	9302529

Accredited Laboratories, Inc. New Jersey Certification Number 12486. This data has been reviewed and accepted by:

Yun-shen Lee, Ph.D. 4/30/93
Technical Director

YSL:jp

338278

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NON-CONFORMANCE SUMMARY

Accredited Labs received 3 solid samples (Project: NL/Dutch Boy; ALI case #2927) from Guardian Environmental Services on 4/13/93 for the analyses of TCLP Volatile Organics, TCLP Base Neutral/Acid Extractable Organics, TCLP Metals, PCBs, Cyanide, Reactive Sulfide, Flash Point and pH.

All analyses were performed within the required holding time.

All solid analyses were reported on a dry weight basis.

STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Let's protect our earth

Certifies That

Accredited Laboratories Inc.
Industrial Hygiene & Env. Lab
400 Middlesex Avenue
Carteret, NJ 07008

having duly met the requirements of the

Regulations Governing Laboratory Certification
And Standards Of Performance N.J.A.C. 7:18 et. seq.

is hereby approved as a

State Certified Water Laboratory

To perform the analyses as indicated on the Annual Certified Parameter List
which must accompany this certificate to be valid

12486
PERMANENT CERTIFICATION NUMBER

March 11, 1987
DATE

COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL PROTECTION

This certification is subject to unannounced laboratory inspections as specified by N.J.A.C. 7:18-2.11(d) and agreed to by the Laboratory Manager on filing the application

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Leachate
SAMPLE NUMBER	9302527	DILUTION FACTOR	10
DATA FILE	>D0227	DATE EXTRACTED	
CLIENT NAME	GES	DATE ANALYZED	04/28/93
FIELD ID	NL-5A	ANALYZED BY	LARRY

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	96 %	76 - 114	OK
Toluene-d8	108 %	88 - 110	OK
Bromofluorobenzene	104 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected

* 2-Butanone = Methyl ethyl ketone

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ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Leachate
SAMPLE NUMBER	9302528	DILUTION FACTOR	10
DATA FILE	>D0212	DATE EXTRACTED	
CLIENT NAME	GES	DATE ANALYZED	04/27/93
FIELD ID	NL-6	ANALYZED BY	LARRY

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	106 %	76 - 114	OK
Toluene-d8	90 %	88 - 110	OK
Bromofluorobenzene	110 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected

* 2-Butanone = Methyl ethyl ketone

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TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Leachate
SAMPLE NUMBER	9302529	DILUTION FACTOR	10
DATA FILE	>D0228	DATE EXTRACTED	
CLIENT NAME	GES	DATE ANALYZED	04/28/93
FIELD ID	NL-7	ANALYZED BY	LARRY

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	98 %	76 - 114	OK
Toluene-d8	101 %	88 - 110	OK
Bromofluorobenzene	98 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected

* 2-Butanone = Methyl ethyl ketone

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ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Leachate
SAMPLE NUMBER	9302527	DILUTION FACTOR	10
DATA FILE	>B1599	DATE EXTRACTED	04/22/93
CLIENT NAME	GES	DATE ANALYZED	04/28/93
FIELD ID	NL-5A	ANALYZED BY	PAUL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	46 %	21 - 100	OK
Phenol-d5	58 %	10 - 94	OK
Nitrobenzene-d5	55 %	35 - 114	OK
2-Fluorobiphenyl	83 %	43 - 116	OK
2,4,6-Tribromophenol	61 %	10 - 123	OK
Terphenyl-d14	95 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Leachate
SAMPLE NUMBER	9302528	DILUTION FACTOR	10
DATA FILE	>B1603	DATE EXTRACTED	04/22/93
CLIENT NAME	GES	DATE ANALYZED	04/28/93
FIELD ID	NL-6	ANALYZED BY	PAUL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	70 %	21 - 100	OK
Phenol-d5	78 %	10 - 94	OK
Nitrobenzene-d5	58 %	35 - 114	OK
2-Fluorobiphenyl	157 %	43 - 116	OUT
2,4,6-Tribromophenol	54 %	10 - 123	OK
Terphenyl-d14	107 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Leachate
SAMPLE NUMBER	9302529	DILUTION FACTOR	10
DATA FILE	>B1601	DATE EXTRACTED	04/22/93
CLIENT NAME	GES	DATE ANALYZED	04/28/93
FIELD ID	NL-7	ANALYZED BY	PAUL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	61 %	21 - 100	OK
Phenol-d5	85 %	10 - 94	OK
Nitrobenzene-d5	65 %	35 - 114	OK
2-Fluorobiphenyl	83 %	43 - 116	OK
2,4,6-Tribromophenol	55 %	10 - 123	OK
Terphenyl-d14	88 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Solid
SAMPLE NUMBER	9302527	DILUTION FACTOR	1
DATA FILE	>A6022	DATE EXTRACTED	04/19/93
CLIENT NAME	GES	DATE ANALYZED	04/20/93
FIELD ID	NL-5A	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
126741	Aroclor-1016	U	41.9
111042	Aroclor-1221	U	83.8
111411	Aroclor-1232	U	41.9
534692	Aroclor-1242	U	41.9
126722	Aroclor-1248	U	41.9
110976	Aroclor-1254	619	41.9
110968	Aroclor-1260	U	41.9

Percent Solid of 79.6 is used for all Target compounds.

(J) Indicates detected below MDL
(U) Indicates compound analyzed for but not detected

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Solid
SAMPLE NUMBER	9302528	DILUTION FACTOR	1
DATA FILE	>A6023	DATE EXTRACTED	04/19/93
CLIENT NAME	GES	DATE ANALYZED	04/20/93
FIELD ID	NL-6	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
126741	Aroclor-1016	U	37.5
111042	Aroclor-1221	U	74.9
111411	Aroclor-1232	U	37.5
534692	Aroclor-1242	U	37.5
126722	Aroclor-1248	U	37.5
110976	Aroclor-1254	3120	37.5
110968	Aroclor-1260	2030	37.5

Percent Solid of 89.0 is used for all Target compounds.

(J) Indicates detected below MDL
(U) Indicates compound analyzed for but not detected

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	2927	MATRIX	Solid
SAMPLE NUMBER	9302529	DILUTION FACTOR	1
DATA FILE	>A6024	DATE EXTRACTED	04/19/93
CLIENT NAME	GES	DATE ANALYZED	04/20/93
FIELD ID	NL-7	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
126741	Aroclor-1016	U	37.9
111042	Aroclor-1221	U	75.8
111411	Aroclor-1232	U	37.9
534692	Aroclor-1242	U	37.9
126722	Aroclor-1248	U	37.9
110976	Aroclor-1254	U	37.9
110968	Aroclor-1260	39200	37.9

Percent Solid of 87.9 is used for all Target compounds.

(J) Indicates detected below MDL
(U) Indicates compound analyzed for but not detected

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ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS

FIELD ID.

NL-5A

Client : GES

Case No.: 2927

Matrix (soil/extract): EXTRACT

Lab Sample ID: 9302527

Date Received: 04/13/93

Concentration Units (mg/L): MG/L

CAS No.	Analyte	Concentration	C	M	Regulatory Level
7440-38-2	Arsenic			NR	5.00
7440-39-3	Barium			NR	100.00
7440-43-9	Cadmium			NR	1.00
7440-47-3	Chromium			NR	5.00
7440-50-8	Copper	0.07	B	P	
7439-92-1	Lead			NR	5.00
7439-97-6	Mercury			NR	0.20
7440-02-0	Nickel			NR	
7782-49-2	Selenium			NR	1.00
7440-22-4	Silver			NR	5.00
7440-28-0	Thallium			NR	
7440-66-6	Zinc	0.19		P	

Comments:

Qualifiers:

B -- greater than the IDL but less than the MDL
U -- less than the IDL
P -- analyzed by ICP
CV -- analyzed by cold vapor
F -- analyzed by GFA
A -- analyzed by flame AA
NR -- analysis not requested

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS

FIELD ID.

NL-6

Client : GES

Case No.: 2927

Matrix (soil/extract): EXTRACT

Lab Sample ID: 9302528

Date Received: 04/13/93

Concentration Units (mg/L): MG/L

CAS No.	Analyte	Concentration	C	M	Regulatory Level
7440-38-2	Arsenic			NR	5.00
7440-39-3	Barium			NR	100.00
7440-43-9	Cadmium			NR	1.00
7440-47-3	Chromium			NR	5.00
7440-50-8	Copper	6.1		P	
7439-92-1	Lead			NR	5.00
7439-97-6	Mercury			NR	0.20
7440-02-0	Nickel			NR	
7782-49-2	Selenium			NR	1.00
7440-22-4	Silver			NR	5.00
7440-28-0	Thallium			NR	
7440-66-6	Zinc	3.2		P	

Comments:

Qualifiers:

B -- greater than the IDL but less than the MDL
U -- less than the IDL
P -- analyzed by ICP
CV -- analyzed by cold vapor
F -- analyzed by GFA
A -- analyzed by flame AA
NR -- analysis not requested

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS

FIELD ID.

NL-7

Client : GES

Case No.: 2927

Matrix (soil/extract): EXTRACT

Lab Sample ID: 9302529

Date Received: 04/13/93

Concentration Units (mg/L): MG/L

CAS No.	Analyte	Concentration	C	M	Regulatory Level
7440-38-2	Arsenic			NR	5.00
7440-39-3	Barium			NR	100.00
7440-43-9	Cadmium			NR	1.00
7440-47-3	Chromium			NR	5.00
7440-50-8	Copper	0.57		P	
7439-92-1	Lead			NR	5.00
7439-97-6	Mercury			NR	0.20
7440-02-0	Nickel			NR	
7782-49-2	Selenium			NR	1.00
7440-22-4	Silver			NR	5.00
7440-28-0	Thallium			NR	
7440-66-6	Zinc	7.1		P	

Comments:

Qualifiers:

B -- greater than the IDL but less than the MDL
U -- less than the IDL
P -- analyzed by ICP
CV -- analyzed by cold vapor
F -- analyzed by GFA
A -- analyzed by flame AA
NR -- analysis not requested

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Accredited Laboratories, Inc.
Total Cyanide

Client: GES
Case #: 2927
Analyst: LS

Matrix: Solid
Date Received: 04/13/93
Date Distilled: 04/14/93
Date Analyzed: 04/16/93

Field #	Sample #	Result mg/kg	MDL mg/kg
NL-5A	9302527	ND	0.25
NL-6	9302528	ND	0.22
NL-7	9302529	ND	0.23

Method Blank:	< 0.20
Percent Spike Recovery:	77.6
RPD of Duplicate Samples:	0.00
Quality Control Number:	930330CN

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Accredited Laboratories, Inc.
Reactive Sulfide

Client: GES
Case #: 2927
Analyst: LS

Matrix: Solid
Date Prepared: 04/15/93
Date Analyzed: 04/19/93

Field #	Sample #	Result mg/kg	MDL mg/kg
NL-5A	9302527	ND	50.2
NL-6	9302528	ND	44.9
NL-7	9302529	ND	45.5

Method Blank:	<40.0
RPD of Duplicate Samples:	0.00
Quality Control Number:	930413RS

Accredited Laboratories, Inc.
Ignitability/Flash Point

Client: GES
Case #: 2927
Analyst: DM

Matrix: Solid
Date Received: 04/13/93
Date Analyzed: 04/16/93

Field #	Sample #	Result Degree Fahrenheit	MDL Degree Fahrenheit
NL-5A	9302527	161	80
NL-6	9302528	> 200	80
NL-7	9302529	> 200	80

Quality Control Number: 9302530

Accredited Laboratories, Inc.
pH

Client: GES
Case #: 2927
Analyst: BO

Matrix: Solid
Date Sampled: 4/12/93
Date Received: 4/13/93
Date Analyzed: 4/14/93

Field #	Sample #	Result SU	MDL SU
NL-5A	9302527	7.52	0.05
NL-6	9302528	7.19	0.05
NL-7	9302529	7.44	0.05

METHODOLOGY SUMMARY

Total Cyanide - SW 846, 9010 (solid)

A representative portion of sample is weighed and placed into a cyanide distillation apparatus. The cyanide as hydrocyanic acid is released from cyanide complexes by means of a reflux-distillation operation and absorbed in a scrubber containing sodium hydroxide solution. The cyanide ion in the absorbing solution is then determined colorimetrically according to EPA "Test Methods for Evaluating Solid Waste", SW 846.

Flash Point - EPA 1010

The sample is heated at a slow, constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame ignites the vapor above the sample. The method is followed according to EPA "Test Methods for Evaluating Solid Waste", SW-846, 3rd ed., 1986.

pH - EPA 9045 (soil)

The soil sample is mixed either with Type II water or with a calcium chloride solution. The pH of the mixed solution is then measured with a pH meter.

PCB's - EPA 3550/8080 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

Toxic Characteristic Leaching Procedure - TCLP (EPA Method 1311)

Before the leaching procedure can be initiated, the information regarding the wet % and dry % solid of the solid sample as well as the utilization of extraction fluid, either #1 or #2, must be determined.

For Volatile Analysis, a special extractor called Zero Headspace Extractor (ZHE) must be used to generate the TCLP leachate. A maximum of 25 grams of sample is placed in the vessel as the liquid

portion is pressed out and saved. A 20X of extraction fluid #1 is charged into the vessel. After 18 +/- 2 hour rotation at 30 +/- 2 rpm, the liquid is pressed out of vessel. The leachate from ZHE is combined with the initial liquid portion, if any. This is referred as TCLP Leachate. The contaminants in the leachate is determined by EPA Method 8240.

For Non-Volatile Analysis, a minimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass extraction bottle and then rotated at 30 +/- 2 rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Base Neutrals/Acids (BNA), pesticides and herbicides in the leachate are determined by EPA Method 8270, EPA Method 8080 and standard Method 509B respectively.

For the Metal Analysis, a minimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass or plastic extraction bottle and then rotated at 30 +/- 2 rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Metals in the leachate is determined by EPA Method 7471 for mercury, Method 7060 for arsenic, Method 7740 for selenium and Method 6010 (ICAP) and/or Method 7000's (Flame-AA) for the rest of metals.

Reactive Sulfide - SW 846, 7.3.4.1 (solid)

The gas generated is swept into a scrubber. The analyte is quantified by Methylene Blue Method. The method is derived from EPA "Test Methods for Evaluating Solid Waste, SW846, 3rd ed., 1986".

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, Inc. Contract: -----

Lab File ID: >D0200 BFB Injection date: 4/27/93

Instrument ID: D BFB Injection time: 11:26

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15 - 40.0% of mass 95	16.0
75	30.0 - 60.0% of mass 95	53.6
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	90.1
175	5.0 - 9.0% of mass 174	6.7(7.4)1
176	95.0 - 101.0% of mass 174	89.2(99.0)1
177	5.0 - 9.0% of mass 176	6.2(7.0)2

1 - Value is % mass 174 2 - Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	VSTD050	>D0201	4/27/93	11:42
2	----------	DAILY BLANK	>D0202	4/27/93	12:35
3	----------	9302431	>D0203	4/27/93	13:25
4	----------	9302339	>D0204	4/27/93	14:02
5	----------	9302340	>D0205	4/27/93	14:40
6	----------	9302451	>D0206	4/27/93	15:17
7	----------	9302512	>D0207	4/27/93	15:54
8	----------	9302339	>D0208	4/27/93	16:31
9	----------	9302650	>D0209	4/27/93	17:08
10	----------	9302651	>D0210	4/27/93	17:45
11	----------	9302527	>D0211	4/27/93	18:23
12	----------	9302528	>D0212	4/27/93	19:00
13	----------	9302529	>D0213	4/27/93	19:38
14	----------	9302530	>D0214	4/27/93	20:15
15	----------	9302531	>D0215	4/27/93	20:52
16	----------	9302532	>D0216	4/27/93	21:29
17	----------	9302533	>D0217	4/27/93	22:06
18	----------	9302534	>D0218	4/27/93	22:43
19	----------	9302535	>D0219	4/27/93	23:20
20					
21					
22					

FORM V VOA

21

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, Inc. Contract: -----

Lab File ID: >D0220 BFB Injection date: 4/28/93

Instrument ID: D BFB Injection time: 6:52

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	46.1
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	82.2
175	5.0 - 9.0% of mass 174	5.8(7.1)1
176	95.0 - 101.0% of mass 174	80.0(97.4)1
177	5.0 - 9.0% of mass 176	4.9(6.1)2

1 - Value is % mass 174 2 - Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	VSTD050	>D0221	4/28/93	7:07
2	----------	DAILY BLANK	>D0223	4/28/93	8:48
3	----------	9302535MS	>D0224	4/28/93	9:35
4	----------	9302531	>D0225	4/28/93	10:12
5	----------	9302532	>D0226	4/28/93	10:49
6	----------	9302527	>D0227	4/28/93	11:36
7	----------	9302529	>D0228	4/28/93	12:13
8					
9					
10					
11					
12					
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14					
15					
16					
17					
18					
19					
20					
21					
22					

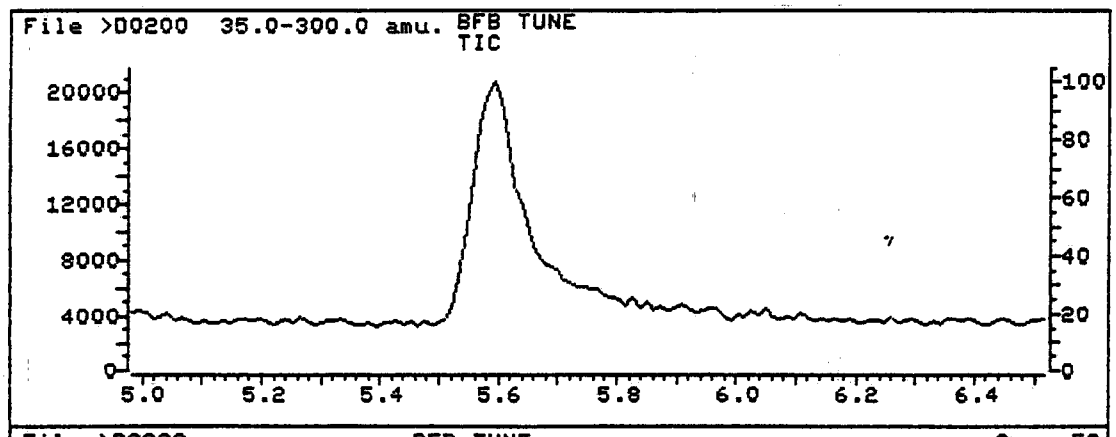
FORM V VOA

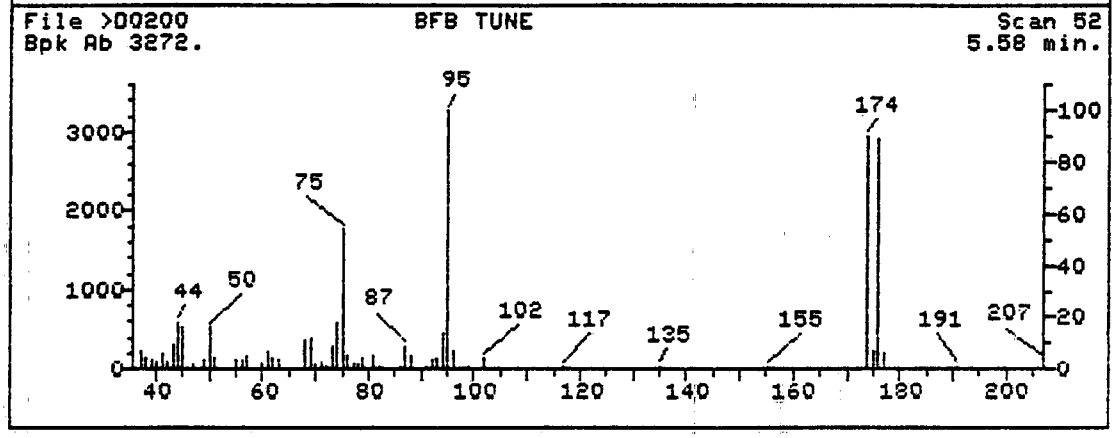
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	16.01	16.01	Ok
75	30-60% of mass 95	53.61	53.61	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.30	7.30	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	90.10	90.10	Ok
175	5-9% of mass 174	6.66	7.39	Ok
176	95-101% of mass 174	89.24	99.05	Ok
177	5-9% of mass 176	6.20	6.95	Ok

Injection Date: 04/27/93
Injection Time: 11:26
Data File: >D0200
Scan: 52





23

>D0200 BFB TUNE
52

File: >D0200 Scan #: 52 Retn. time: 5.58

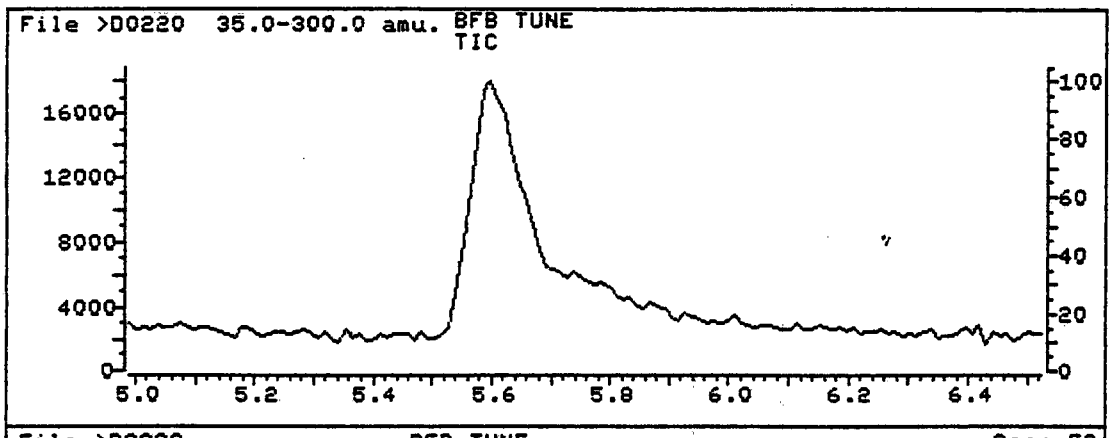
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.65	27.00	49.05	108.00	69.00	378.00	80.90	164.00	99.05	35.00
37.05	214.00	50.05	524.00	70.10	65.00	81.90	45.00	101.95	134.00
38.05	147.00	51.05	145.00	71.10	80.00	86.00	21.00	116.95	24.00
39.05	119.00	55.10	105.00	72.10	38.00	86.95	285.00	135.00	38.00
39.95	90.00	56.00	111.00	73.00	281.00	88.05	173.00	155.10	34.00
41.05	188.00	57.00	166.00	74.00	596.00	90.95	22.00	173.95	2948.00
41.95	90.00	60.00	76.00	75.00	1754.00	91.95	107.00	174.95	218.00
43.05	296.00	61.00	226.00	76.00	160.00	93.05	147.00	175.95	2920.00
44.05	587.00	62.00	136.00	77.00	80.00	94.05	436.00	176.95	203.00
45.05	520.00	63.00	105.00	78.00	55.00	94.95	3272.00	190.90	28.00
46.95	71.00	68.00	357.00	79.00	136.00	96.05	239.00	207.10	102.00

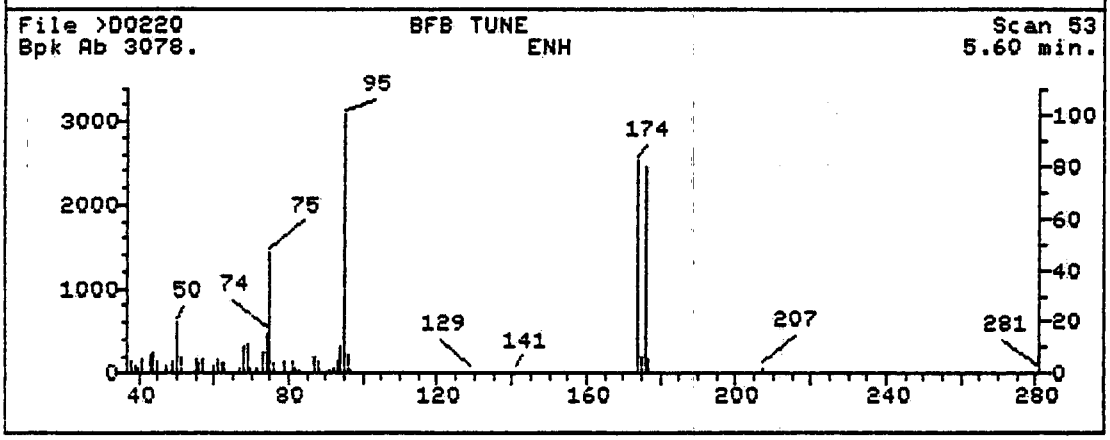
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	19.48	19.48	Ok
75	30-60% of mass 95	46.06	46.06	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.10	7.10	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	82.18	82.18	Ok
175	5-9% of mass 174	5.84	7.11	Ok
176	95-101% of mass 174	80.01	97.37	Ok
177	5-9% of mass 176	4.89	6.12	Ok

Injection Date: 04/28/93
Injection Time: 06:52
Data File: >D0220
Scan: 53





25

>D0220 BFB TUNE
53 ENH

File: >D0220 Scan #: 53 Retn. time: 5.60

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.95	173.40	51.05	190.20	69.90	46.00	86.95	193.80	105.05	6.80
37.95	133.60	55.00	154.20	70.10	9.60	87.95	133.60	118.95	13.20
38.95	90.40	56.00	99.80	71.10	59.40	90.95	41.00	129.00	14.00
39.95	54.20	57.00	161.20	73.00	233.80	91.95	70.00	133.00	7.00
41.05	156.80	60.10	76.00	74.00	477.00	92.95	124.00	141.00	14.40
43.05	210.40	61.00	153.20	75.00	1417.60	94.05	316.20	173.95	2529.20
43.95	235.40	62.00	119.60	76.00	120.40	95.05	3077.80	174.95	179.80
45.05	129.80	63.00	110.40	79.00	127.80	95.95	218.40	175.95	2462.60
46.95	79.00	67.00	60.40	84.00	140.00	96.95	33.40	176.95	150.60
49.05	128.00	68.00	328.20	81.90	58.00	103.65	4.80	207.10	67.20
50.05	599.60	69.00	354.20	83.10	26.40	104.15	7.20	281.10	12.00

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5790BD

Contractor: Accredited Labs Inc. Calibration Date: 04/13/93

Contract No: CADA14

Minimum $\overline{RF}$ for SPCC is .30 Maximum % RSD for CCC is 25%

Compound	>D0080 RF 10.00	>D0081 RF 20.00	>D0079 RF 50.00	>D0076 RF 100.00	>D0075 RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Acrolein	-	.05075	.08335	.10075	.09846	.606	.08333	27.661			
Acrylonitrile	-	.20789	.16564	.21250	.20101	.757	.19676	10.813			
Chloromethane	.40597	.61487	.34329	.36518	.45823	.386	.43751	24.774		**	
Bromomethane	.96998	1.13947	.96161	1.24739	1.28685	.469	1.12106	13.530			
Vinyl Chloride	.49318	.60292	.42396	.47798	.36703	.405	.47301	18.595	*		
Chloroethane	.41925	.60243	.48190	.61507	.62589	.480	.54891	16.912			
Methylene Chloride	1.98158	2.30407	1.55413	1.75120	1.63959	.731	1.84611	16.363			
Acetone	.47990	.49873	.34434	.26776	.36805	.622	.39176	24.682			
Carbon Disulfide	1.15814	1.62576	1.20654	1.49720	1.44890	.733	1.38731	14.323			
Trichlorofluoromethane	2.28838	2.90357	2.16596	2.64677	2.66665	.523	2.53427	11.882			
1,1-Dichloroethene	1.54640	2.13425	1.56979	1.81894	1.76063	.640	1.76600	13.435	*		
1,1-Dichloroethane	1.77041	2.42607	1.70930	2.05136	1.92614	.855	1.97666	14.401		**	
T-butyl alcohol	-	.02180	.01547	.01935	.01714	.661	.01844	14.885			(Conc=30.0,60.0,150.0,300
cis-1,2-Dichloroethene	1.54241	2.12571	1.48564	1.82884	1.67351	.951	1.73122	14.852			
trans-1,2-Dichloroethene	1.47114	2.01810	1.48547	1.75059	1.65943	.783	1.67695	13.372			
Chloroform	2.16974	2.92407	2.10080	2.57317	2.39467	.975	2.43249	13.665	*		
1,2-Dichloroethane-d4	1.14486	1.51620	1.14965	1.37718	1.26032	1.081	1.28964	12.286			
1,2-Dichloroethane	1.38879	1.75288	1.31334	1.58136	1.45827	1.094	1.49893	11.532			
2-Butanone	.18482	.27597	.18419	.17430	.21847	.818	.20755	20.111			
Methyl t-butyl ether	.46411	.62432	.42976	.53057	.47820	.674	.50539	14.985			
1,1,1-Trichloroethane	.63086	.91673	.61074	.77532	.72517	.913	.73176	16.873			
Carbon Tetrachloride	.69395	.95287	.65916	.85189	.81575	.947	.79473	15.054			
Vinyl Acetate	.44493	.65580	.47859	.59214	.57331	.757	.54895	15.682			
Bromodichloromethane	.79460	1.08493	.82778	.98385	.91607	1.092	.92145	12.785			
1,2-Dichloropropane	.41387	.52458	.37218	.44746	.41433	1.063	.43448	13.120	*		
cis-1,3-Dichloropropene	.41661	.55903	.43973	.54209	.52941	1.213	.49737	12.981			(Conc=10.6,21.2,53.0,106.
Trichloroethene	.44034	.57445	.42072	.50005	.47782	1.041	.48268	12.422			
Benzene	.81505	1.13284	.76167	.92293	.87350	.969	.90120	15.867			
Dibromochloromethane	.70822	1.00788	.73379	.91359	.82894	1.297	.83848	14.891			
1,1,2-Trichloroethane	.33049	.46163	.31819	.38298	.35063	1.232	.36878	15.564			

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5790BD

Contractor: Accredited Labs Inc. Calibration Date: 04/13/93

Contract No: CADA14

Minimum $\overline{RF}$ for SPCC is .30 Maximum % RSD for CCC is 25%

Laboratory ID:	>D0080	>D0081	>D0079	>D0076	>D0075						
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
trans-1,3-Dichloropropene	.46979	.63039	.49586	.61129	.59699	1.213	.56087	12.981			(Conc=9.4,18.8,47.0,94.0,
2-Chloroethylvinylether	.08417	.12767	.11044	.14413	.16532	1.126	.12634	24.615			
Bromoform	.50501	.81886	.56669	.76156	.71599	1.481	.67362	19.707		**	
2-Hexanone	.56766	.77676	.60247	.69233	.65449	.828	.65874	12.365			
4-Methyl-2-pentanone	.32408	.43200	.33290	.33032	.35320	.903	.35450	12.603			
Tetrachloroethene	.76709	1.01236	.71440	.81817	.72815	.932	.80803	14.989			
1,1,2,2-Tetrachloroethane	.69537	.96374	.66941	.79495	.74719	1.096	.77413	15.048		**	
Toluene-d8	1.08729	1.42482	1.03552	1.18310	1.05002	.869	1.15615	13.911			
Toluene	1.18293	1.49980	1.11788	1.22743	1.12130	.876	1.22987	12.818	*		
Chlorobenzene	.88377	1.16537	.82221	.97113	.88746	1.003	.94599	14.121		**	
Bromofluorobenzene	.72275	1.02667	.70816	.89029	.82713	1.104	.83500	15.677			
Ethylbenzene	1.34395	1.82911	1.24905	1.52345	1.37962	1.007	1.46504	15.436	*		
Styrene	.63713	1.02349	.74056	.89886	.86747	1.054	.83350	17.868			
m,p-Xylene	1.11130	1.45282	1.01459	1.19785	1.05147	1.013	1.16561	15.002			(Conc=20.0,40.0,100.0,200
o-Xylene	1.32658	1.78287	1.16485	1.44173	1.26804	1.051	1.39682	17.031			

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 04/27/93

Contractor: Accredited Labs Inc. Time: 11:42

Contract No: CADA14 Laboratory ID: >D0201

Instrument ID: HP5790BD Initial Calibration Date: 04/13/93

Minimum $\overline{RF}$ for SPCC is .30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Acrolein	.08333	.07036	15.56			
Acrylonitrile	.19676	.17788	9.60			
Chloromethane	.43751	.35164	19.63		**	
Bromomethane	1.12106	1.02837	8.27			
Vinyl Chloride	.47301	.44942	4.99	*		
Chloroethane	.54891	.46055	16.10			
Methylene Chloride	1.84611	1.27847	30.75			
Acetone	.39176	.21785	44.39			
Carbon Disulfide	1.38731	1.19813	13.64			
Trichlorofluoromethane	2.53427	2.60494	2.79			
1,1-Dichloroethene	1.76600	1.45749	17.47	*		
1,1-Dichloroethane	1.97666	1.81415	8.22		**	
T-butyl alcohol	.01844	.01853	.50			(Conc=150.00)
cis-1,2-Dichloroethene	1.73122	1.44626	16.46			
trans-1,2-Dichloroethene	1.67695	1.41378	15.69			
Chloroform	2.43249	2.46274	1.24	*		
1,2-Dichloroethane-d4	1.28964	1.43805	11.51			
1,2-Dichloroethane	1.49893	1.52169	1.52			
2-Butanone	.20755	.14329	30.96			
Methyl t-butyl ether	.50539	.48362	4.31			
1,1,1-Trichloroethane	.73176	.80887	10.54			
Carbon Tetrachloride	.79473	.85030	6.99			
Vinyl Acetate	.54895	.45571	16.99			
Bromodichloromethane	.92145	.99097	7.55			
1,2-Dichloropropane	.43448	.41267	5.02	*		
cis-1,3-Dichloropropene	.49737	.55473	11.53			(Conc=53.00)
Trichloroethene	.48268	.56492	17.04			
Benzene	.90120	.91862	1.93			
Dibromochloromethane	.83848	.98859	17.90			
1,1,2-Trichloroethane	.36878	.37973	2.97			
trans-1,3-Dichloropropene	.56087	.62555	11.53			(Conc=47.00)
2-Chloroethylvinylether	.12634	.15517	22.81			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 04/27/93

Contractor: Accredited Labs Inc. Time: 11:42

Contract No: CADA14 Laboratory ID: >D0201

Instrument ID: HP5790BD Initial Calibration Date: 04/13/93

Minimum $\overline{RF}$ for SPCC is .30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Bromoform	.67362	.83091	23.35		**	
2-Hexanone	.65874	.68295	3.67			
4-Methyl-2-pentanone	.35450	.31665	10.68			
Tetrachloroethene	.80803	1.01723	25.89			
1,1,2,2-Tetrachloroethane	.77413	.95351	23.17		**	
Toluene-d8	1.15615	1.37828	19.21			
Toluene	1.22987	1.33877	8.85	*		
Chlorobenzene	.94599	1.00546	6.29		**	
Bromofluorobenzene	.83500	1.16171	39.13			
Ethylbenzene	1.46504	1.64749	12.45	*		
Styrene	.83350	.95845	14.99			
m,p-Xylene	1.16561	1.28910	10.59			(Conc=100.00)
o-Xylene	1.39682	1.43744	2.91			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 04/28/93

Contractor: Accredited Labs Inc. Time: 07:07

Contract No: CADA14 Laboratory ID: >D0221

Instrument ID: HP5790BD Initial Calibration Date: 04/13/93

Minimum $\overline{RF}$ for SPCC is .30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Acrolein	.08333	.11087	33.05			
Acrylonitrile	.19676	.25683	30.53			
Chloromethane	.43751	.43782	.07		**	
Bromomethane	1.12106	1.14893	2.49			
Vinyl Chloride	.47301	.58195	23.03	*		
Chloroethane	.54891	.59904	9.13			
Methylene Chloride	1.84611	1.82360	1.22			
Acetone	.39176	.33232	15.17			
Carbon Disulfide	1.38731	1.44827	4.39			
Trichlorofluoromethane	2.53427	3.19038	25.89			
1,1-Dichloroethene	1.76600	1.89386	7.24	*		
1,1-Dichloroethane	1.97666	2.14250	8.39		**	
T-butyl alcohol	.01844	.02154	16.80			(Conc=150.00)
cis-1,2-Dichloroethene	1.73122	1.86526	7.74			
trans-1,2-Dichloroethene	1.67695	1.82699	8.95			
Chloroform	2.43249	2.71619	11.66	*		
1,2-Dichloroethane-d4	1.28964	1.66408	29.03			
1,2-Dichloroethane	1.49893	1.73639	15.84			
2-Butanone	.20755	.19233	7.33			
Methyl t-butyl ether	.50539	.55343	9.50			
1,1,1-Trichloroethane	.73176	.81934	11.97			
Carbon Tetrachloride	.79473	.83449	5.00			
Vinyl Acetate	.54895	.50897	7.28			
Bromodichloromethane	.92145	1.10752	20.19			
1,2-Dichloropropane	.43448	.47654	9.68	*		
cis-1,3-Dichloropropene	.49737	.63711	28.10			(Conc=53.00)
Trichloroethene	.48268	.56187	16.41			
Benzene	.90120	.94402	4.75			
Dibromochloromethane	.83848	.98711	17.73			
1,1,2-Trichloroethane	.36878	.43381	17.63			
trans-1,3-Dichloropropene	.56087	.71844	28.10			(Conc=47.00)
2-Chloroethylvinylether	.12634	.18956	50.03			

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: | Calibration Date: 04/28/93

Contractor: Accredited Labs Inc. | Time: 07:07

Contract No: CADA14 | Laboratory ID: >D0221

Instrument ID: HP5790BD | Initial Calibration Date: 04/13/93

Minimum $\overline{RF}$ for SPCC is .30 | Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Bromoform	.67362	.75847	12.60		**
2-Hexanone	.65874	.72184	9.58		
4-Methyl-2-pentanone	.35450	.35742	.82		
Tetrachloroethene	.80803	.88704	9.78		
1,1,2,2-Tetrachloroethane	.77413	.85383	10.30		**
Toluene-d8	1.15615	1.40062	21.14		
Toluene	1.22987	1.39260	13.23	*	
Chlorobenzene	.94599	1.03436	9.34		**
Bromofluorobenzene	.83500	1.07009	28.15		
Ethylbenzene	1.46504	1.67963	14.65	*	
Styrene	.83350	.83951	.72		
m,p-Xylene	1.16561	1.27482	9.37		(Conc=100.00)
o-Xylene	1.39682	1.26762	9.25		

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ACCREDITED LABORATORIES, INC.
TCLP VOLATILE MATRIX SPIKE RECOVERY

Matrix Spike Sample No.: 9302535

Date Analyzed: 04/28/93

Data File: >D0224

COMPOUND	SPIKE ADDED (mg/l)	SAMPLE CONCENTRATION (mg/l)	MS CONCENTRATION (mg/l)	MS % REC
Benzene	.050	.000	.038	77
2-Butanone	.100	.000	.067	67
Carbon Tetrachloride	.050	.000	.041	83
Chlorobenzene	.050	.000	.038	76
Chloroform	.050	.000	.038	75
1,1-Dichloroethene	.050	.000	.032	63
1,2-Dichloroethane	.050	.000	.035	71
Tetrachloroethene	.050	.000	.036	71
Trichloroethene	.050	.000	.035	69
Vinyl Chloride	.050	.000	.035	70

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	DAILY B	DILUTION FACTOR	10
DATA FILE	>D0202	DATE EXTRACTED	
CLIENT NAME		DATE ANALYZED	04/27/93
FIELD ID		ANALYZED BY	LARRY

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	86 %	76 - 114	OK
Toluene-d8	97 %	88 - 110	OK
Bromofluorobenzene	104 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected

* 2-Butanone = Methyl ethyl ketone

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	DAILY B	DILUTION FACTOR	10
DATA FILE	>D0223	DATE EXTRACTED	
CLIENT NAME		DATE ANALYZED	04/28/93
FIELD ID		ANALYZED BY	LARRY

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	97 %	76 - 114	OK
Toluene-d8	103 %	88 - 110	OK
Bromofluorobenzene	94 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected

* 2-Butanone = Methyl ethyl ketone

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4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

DAILY BL

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: 2927 SAS No.: SDG No.:

Lab File ID: >D0202 Lab Sample ID: DAILY BL

Date Analyzed: 04/27/93 Time Analyzed: 12:35

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) N

Instrument ID: HP5970BD

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		9302528	>D0212	19:00
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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19				
20				
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22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

DAILY BL

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: 2927 SAS No.: SDG No.:

Lab File ID: >D0223 Lab Sample ID: DAILY BL

Date Analyzed: 04/28/93 Time Analyzed: 08:48

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) N

Instrument ID: HP5970BD

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		9302535MS	>D0224	09:35
02		9302527	>D0227	11:36
03		9302529	>D0228	12:13
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
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25				
26				
27				
28				
29				
30				

COMMENTS:

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5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ACCREDITED LABORATORIES, Inc. Contract : -----

Lab File ID: >B1593 DFTPP Injection date: 4/28/93

Instrument ID: B DFTPP Injection time: 8:38

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.1
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	49.8
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	40.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	17.1
365	Greater than 1.00% of mass 198	1.49
441	Present, but less than mass 443	2.0
442	Greater than 40.0% of mass 198	50.5
443	17.0 - 23.0% of mass 442	9.7(19.1)2

1 - Value is % mass 69 2 - Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	----------	SSTD050	>B1595	4/28/93	9:47
2	----------	SBLK76	>B1596	4/28/93	10:44
3	----------	SBLK77	>B1597	4/28/93	11:34
4	----------	9302542	>B1598	4/28/93	12:23
5	----------	9302527	>B1599	4/28/93	13:13
6	----------	9302529	>B1601	4/28/93	14:47
7	----------	9302430	>B1602	4/28/93	15:32
8	----------	9302528	>B1603	4/28/93	16:17
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV

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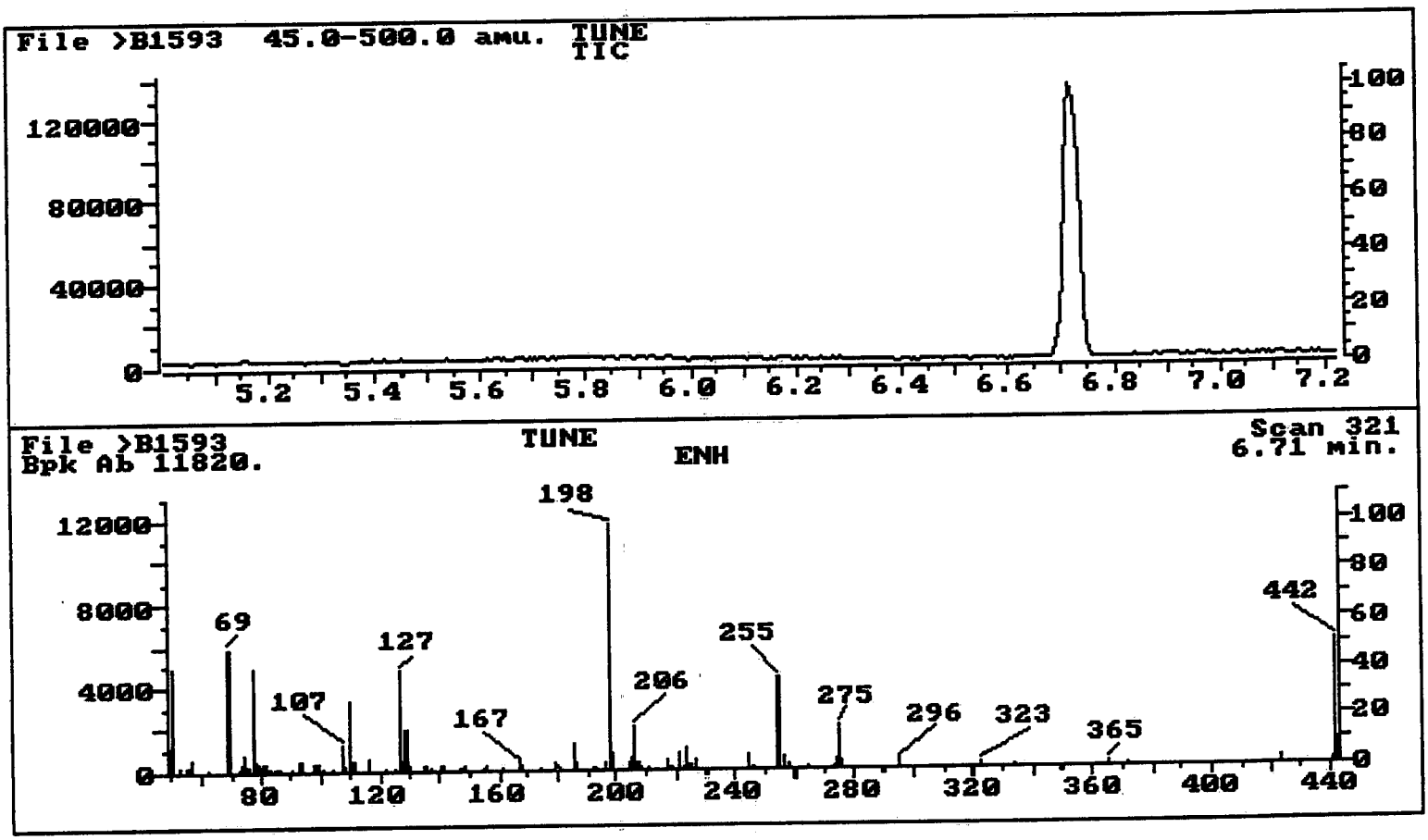
GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-60% of mass 198	41.07	41.07	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	49.83	49.83	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	40-60% of mass 198	40.36	40.36	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.56	6.56	Ok
275	10-30% of mass 198	17.11	17.11	Ok
365	Greater than 1% of mass 198	1.49	1.49	Ok
441	Less than mass 443	1.97	20.40	Ok
442	Greater than 40% of mass 198	50.50	50.50	Ok
443	17-23% of mass 442	9.66	19.13	Ok

Injection Date: 04/28/93
Injection Time: 08:38
Data File: >B1593
Scan: 321



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>B1593 TUNE
321 ENH

File: >B1593 Scan #: 321 Retn. time: 6.71

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
48.90	47.0	90.85	94.2	135.05	204.8	195.85	344.8	241.95	23.2
50.00	1115.6	91.85	62.8	136.05	45.0	197.95	11819.8	243.65	49.6
51.00	4854.6	92.15	9.8	137.00	102.6	198.95	775.4	244.15	759.4
52.10	262.8	92.95	453.2	140.90	204.0	199.85	60.0	246.10	113.0
55.20	217.2	93.95	38.8	142.10	54.8	201.15	16.6	254.90	4359.0
56.10	221.0	98.05	319.6	147.00	123.6	201.75	71.6	256.00	605.0
57.00	490.0	99.05	356.2	148.00	189.2	202.65	15.0	258.10	214.6
60.00	62.4	100.95	172.6	148.90	61.8	204.05	339.6	265.10	93.6
62.10	41.6	102.95	74.0	151.10	27.8	204.95	521.6	273.00	135.2
63.00	140.4	104.95	113.8	155.00	133.2	206.05	2101.6	274.00	374.0
67.00	44.2	106.05	42.4	156.10	177.8	206.95	337.0	275.00	2022.8
69.00	5889.6	107.05	1233.4	158.90	9.6	207.95	77.4	276.10	287.8
71.20	59.8	108.15	185.8	159.90	62.4	210.05	36.6	277.10	61.4
73.10	174.0	108.95	34.2	161.00	95.2	210.75	75.4	295.90	414.4
74.00	344.6	110.05	3277.6	165.10	39.0	211.15	60.0	322.95	182.0
75.00	794.8	111.05	462.6	167.10	375.6	211.35	25.0	333.95	134.2
76.10	239.4	111.95	55.8	167.80	185.8	211.65	16.4	354.05	51.2
77.10	4926.4	112.15	13.2	174.90	134.0	217.05	426.2	365.00	176.0
78.10	376.0	115.95	59.8	176.20	43.2	217.85	77.2	371.80	84.6
79.10	303.8	117.05	628.2	177.00	72.8	221.05	829.4	372.10	46.0
80.00	232.0	122.05	78.6	179.00	326.4	222.85	110.2	423.05	307.6
81.00	340.6	123.85	65.8	180.00	185.4	223.25	20.2	424.05	65.2
81.90	123.4	125.15	81.6	181.10	100.8	224.15	1033.4	440.95	233.0
83.05	153.8	127.05	4770.0	186.00	1253.0	225.15	201.0	442.05	5969.4
85.05	93.8	127.95	372.0	187.00	355.4	226.95	387.6	442.95	1142.0
85.95	113.0	129.05	1935.8	192.05	84.0	229.05	53.6	443.95	105.8
86.95	82.6	130.05	176.2	192.85	84.0				

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5970BB

Contractor: Accredited Labs Calibration Date: 04/27/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>B1580	>B1583	>B1582	>B1581	>B1579					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Pyridine	1.67717	1.67198	1.90947	1.23963	.98876	.424	1.49740	24.937		
N-Nitrosodimethylamine	.81715	1.04354	1.19860	1.29635	.71156	.422	1.01344	24.415		
2-Fluorophenol	.85568	1.03415	1.31681	1.51507	1.71482	.739	1.28731	27.075		
Aniline	1.71324	2.55767	2.65409	2.62860	2.94434	.941	2.49959	18.551		
Phenol-d5	1.94387	1.71185	1.67495	1.57672	1.57001	.952	1.69548	8.956		
Phenol	1.51720	2.00142	1.71100	1.73826	1.87124	.955	1.76783	10.283	*	
bis(-2-Chloroethyl)Ether	2.06319	1.55155	1.78953	1.74701	1.25741	.956	1.68174	17.799		
2-Chlorophenol	1.40485	1.40592	1.23581	1.14067	1.40599	.966	1.31865	9.382		
1,3-Dichlorobenzene	1.61643	1.40283	1.26209	1.36601	1.18596	.991	1.36666	11.983		
1,4-Dichlorobenzene	.89583	1.28533	1.43730	1.07644	1.10231	1.004	1.15944	17.921	*	
Benzyl Alcohol	.39910	.51360	.48072	.73296	.83624	1.047	.59252	31.035		
1,2-Dichlorobenzene	1.62800	1.34265	.93564	1.11112	1.12989	1.045	1.22946	21.593		
2-Methylphenol	1.20924	1.26337	1.25158	1.26335	1.53230	1.097	1.30397	9.936		
bis(2-Chloroisopropyl)ether	2.29990	2.94485	3.22680	2.47236	2.71617	1.080	2.73202	13.505		
3&4-Methylphenol	1.26176	1.31805	1.25158	1.22618	1.43256	1.118	1.29803	6.345		
N-Nitroso-Di-n-propylamine	1.85180	1.27833	1.32208	1.37039	1.13646	1.113	1.39181	19.512		**
Hexachloroethane	.35927	.37157	.32284	.34112	.42808	1.114	.36458	10.974		
Nitrobenzene-d5	.41300	.40118	.53713	.43850	.42665	.877	.44329	12.251		
Nitrobenzene	.43744	.36286	.54734	.43136	.40369	.880	.43654	15.710		
Isophorone	.81687	.94619	1.21103	1.12453	.59845	.926	.93941	26.040		
2-Nitrophenol	.16254	.20170	.30701	.24313	.25146	.937	.23317	23.358	*	
2,4-Dimethylphenol	.22270	.32655	.38802	.31769	.35241	.956	.32148	19.165		
Benzoic Acid	.10662	.19109	.27509	.16897	.29480	.989	.20731	37.457		
bis(-2-Chloroethoxy)Methane	.43122	.57220	.66963	.63998	.52553	.969	.56771	16.720		
2,4-Dichlorophenol	.26621	.30197	.35739	.29960	.33595	.984	.31222	11.307	*	
1,2,4-Trichlorobenzene	.28621	.32112	.33310	.27394	.27895	.994	.29866	8.930		
Naphthalene	.89956	.73304	1.00978	.51490	.62177	1.003	.75581	26.601		
4-Chloroaniline	.38865	.40777	.52946	.49327	.52055	1.021	.46794	13.974		
Hexachlorobutadiene	.13392	.10563	.11434	.11357	.15541	1.039	.12457	16.171	*	
4-Chloro-3-methylphenol	.31332	.38580	.51791	.43895	.49448	1.118	.43009	19.291	*	

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5970BB

Contractor: Accredited Labs Calibration Date: 04/27/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>B1580	>B1583	>B1582	>B1581	>B1579					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
2-Methylnaphthalene	.63241	.66143	.65810	.56838	.53050	1.129	.61016	9.526		
Hexachlorocyclopentadiene	.13715	.22635	.20066	.24763	.27020	.887	.21640	23.673		**
2,4,6-Trichlorophenol	.30475	.41216	.41991	.40652	.41675	.900	.39202	12.510	*	
2,4,5-Trichlorophenol	.33203	.42949	.49709	.43060	.35189	.907	.40822	16.355		
2-Chloronaphthalene	.89601	1.16376	1.02303	1.02087	.79790	.921	.98031	14.199		
2-Fluorobiphenyl	.88412	1.21726	1.00005	.95961	.66722	.911	.94565	21.033		
2-Nitroaniline	.34173	.55134	.67442	.62551	.62911	.943	.56442	23.400		
Dimethyl Phthalate	1.24667	1.77047	2.06364	1.69187	1.55377	.975	1.66528	17.968		
Acenaphthylene	1.35441	.46596	1.33068	1.23155	.98372	.984	1.07327	34.461		
3-Nitroaniline	.27431	.41462	.53016	.44581	.41807	1.001	.41659	22.131		
Acenaphthene	.99977	.96662	1.17222	.79912	.83510	1.005	.95456	15.538	*	
2,4-Dinitrophenol	.03537	.17261	.29737	.31268	.34790	1.014	.23319	55.253		**
4-Nitrophenol	.07741	.14644	.21816	.19917	.19655	1.034	.16755	33.991		**
Dibenzofuran	1.24578	1.53712	1.52298	1.34384	1.01372	1.027	1.33269	16.243		
2,6-Dinitrotoluene	.27506	.42383	.51083	.48665	.47248	.983	.43377	21.724		
2,4-Dinitrotoluene	.39359	.60200	.71254	.65423	.69117	1.035	.61071	21.026		
Diethylphthalate	1.25999	1.66228	1.64618	1.23029	1.05901	1.073	1.37155	19.633		
4-Chlorophenyl-phenylether	.58058	.74184	.63154	.53470	.33920	1.077	.56557	26.202		
Fluorene	.90982	1.17905	.95728	.81442	.78213	1.074	.92854	16.891		
4-Nitroaniline	.31688	.47054	.62804	.55999	.59026	1.087	.51314	24.199		
2,4,6-Tribromophenol	.11585	.13658	.23513	.19704	.21093	1.110	.17911	28.309		
4,6-Dinitro-2-methylphenol	.14333	.15774	.16002	.16077	.16953	.749	.15828	5.989		
N-Nitrosodiphenylamine	.50372	.44348	.51424	.40657	.33659	.912	.44092	16.586	*	
Azobenzene	1.23923	1.16871	1.01542	.73869	.65836	.915	.96408	26.672		
4-Bromophenyl-phenylether	.15789	.17404	.18079	.19323	.15441	.950	.17207	9.374		
Hexachlorobenzene	.13090	.15617	.21966	.15966	.16196	.965	.16567	19.706		
Pentachlorophenol	-	.08439	.12429	.12202	.13051	.988	.11530	18.141	*	
Phenanthrene	.68431	.69690	.72042	.72043	.53569	1.002	.67155	11.544		
Anthracene	.75696	.53817	.73182	.44389	.39566	1.008	.57330	28.714		
1,2-Diphenylhydrazine	.01675	.06847	.12166	.13327	.14366	.844	.09676	55.064		

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5970BB

Contractor: Accredited Labs Calibration Date: 04/27/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>B1580	>B1583	>B1582	>B1581	>B1579					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Di-n-Butylphthalate	.74181	.80984	.96689	.57381	.59724	1.078	.73792	21.887		
Fluoranthene	.46673	.76497	.62539	.48406	.57104	1.139	.58244	20.739	*	
Benzidine	.30402	.23535	.39843	.48930	.75573	.886	.43657	46.403		
Pyrene	1.98112	1.50126	1.65708	1.63427	1.94439	.893	1.74362	11.993		
Terphenyl-d14	1.39862	1.20046	1.06368	1.41360	1.64895	.909	1.34506	16.624		
Butylbenzylphthalate	.85125	.94536	1.05510	1.19219	1.64119	.957	1.13702	27.191		
3,3'-Dichlorobenzidine	.17857	.27078	.31489	.41669	.32353	.998	.30089	28.776		
Benzo(a)Anthracene	.80742	.94137	1.02069	1.09049	1.31923	.998	1.03584	18.357		
Bis(2-Ethylhexyl)Phthalate	.98958	1.10394	1.33571	1.44305	1.19590	1.010	1.21363	14.859		
Chrysene	.60086	.77254	.92315	.95578	.74947	1.002	.80036	17.933		
Di-n-octyl phthalate	2.61853	3.72479	4.40345	3.78057	3.21506	.936	3.54848	18.862	*	
Benzo(b)fluoranthene	1.06737	1.42364	1.41646	1.76894	1.33489	.965	1.40226	17.893		
Benzo(k)Fluoranthene	.73564	.81670	1.42628	1.02793	2.35129	.966	1.27157	51.916		
Benzo(a)Pyrene	.51202	.78907	1.10531	1.13134	1.06596	.995	.92074	28.934	*	
Indeno(1,2,3-cd)Pyrene	.32111	.44919	.52998	.62750	.56165	1.128	.49789	23.662		
Dibenzo(a,h)Anthracene	.24266	.37664	.52801	.49965	.47045	1.132	.42348	27.392		
Benzo(g,h,i)Perylene	.19006	.27679	.33087	.39356	.34665	1.165	.30759	25.298		

RF - Response Factor (Subscript is amount in ug/l)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No: | Calibration Date: 04/28/93

Contractor: Accredited Labs | Time: 09:47

Contract No: | Laboratory ID: >B1595

Instrument ID: HP5970BB | Initial Calibration Date: 04/27/93

Minimum $\overline{RF}$ for SPCC is 0.05 | Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Pyridine	1.49740	1.28347	14.29		
N-Nitrosodimethylamine	1.01344	.98517	2.79		
2-Fluorophenol	1.28731	1.19114	7.47		
Aniline	2.49959	2.18218	12.70		
Phenol-d5	1.69548	1.14690	32.36		
Phenol	1.76783	1.85006	4.65	*	
bis(-2-Chloroethyl)Ether	1.68174	1.73233	3.01		
2-Chlorophenol	1.31865	.97782	25.85		
1,3-Dichlorobenzene	1.36666	1.08417	20.67		
1,4-Dichlorobenzene	1.15944	1.50699	29.98	*	
Benzyl Alcohol	.59252	.59403	.25		
1,2-Dichlorobenzene	1.22946	.80964	34.15		
2-Methylphenol	1.30397	1.08511	16.78		
bis(2-Chloroisopropyl)ether	2.73202	2.93561	7.45		
3&4-Methylphenol	1.29803	1.08504	16.41		
N-Nitroso-Di-n-propylamine	1.39181	1.08225	22.24		**
Hexachloroethane	.36458	.39354	7.95		
Nitrobenzene-d5	.44329	.36365	17.97		
Nitrobenzene	.43654	.36443	16.52		
Isophorone	.93941	1.15593	23.05		
2-Nitrophenol	.23317	.27023	15.89	*	
2,4-Dimethylphenol	.32148	.32791	2.00		
Benzoic Acid	.20731	.20949	1.05		
bis(-2-Chloroethoxy)Methane	.56771	.78240	37.82		
2,4-Dichlorophenol	.31222	.29392	5.86	*	
1,2,4-Trichlorobenzene	.29866	.32152	7.65		
Naphthalene	.75581	.84510	11.81		
4-Chloroaniline	.46794	.44271	5.39		
Hexachlorobutadiene	.12457	.12712	2.04	*	
4-Chloro-3-methylphenol	.43009	.44464	3.38	*	
2-Methylnaphthalene	.61016	.69711	14.25		
Hexachlorocyclopentadiene	.21640	.20940	3.23		**

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 04/28/93

Contractor: Accredited Labs Time: 09:47

Contract No: Laboratory ID: >B1595

Instrument ID: HP5970BB Initial Calibration Date: 04/27/93

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
2,4,6-Trichlorophenol	.39202	.39485	.72	*	
2,4,5-Trichlorophenol	.40822	.40129	1.70		
2-Chloronaphthalene	.98031	1.20233	22.65		
2-Fluorobiphenyl	.94565	1.26074	33.32		
2-Nitroaniline	.56442	.49995	11.42		
Dimethyl Phthalate	1.66528	1.99817	19.99		
Acenaphthylene	1.07327	1.71430	59.73		
3-Nitroaniline	.41659	.37748	9.39		
Acenaphthene	.95456	1.05122	10.13	*	
2,4-Dinitrophenol	.23319	.07433	68.12		**
4-Nitrophenol	.16755	.11124	33.61		**
Dibenzofuran	1.33269	1.56901	17.73		
2,6-Dinitrotoluene	.43377	.40470	6.70		
2,4-Dinitrotoluene	.61071	.60332	1.21		
Diethylphthalate	1.37155	1.97691	44.14		
4-Chlorophenyl-phenylether	.56557	.77242	36.57		
Fluorene	.92854	1.31082	41.17		
4-Nitroaniline	.51314	.36621	28.63		
2,4,6-Tribromophenol	.17911	.15956	10.91		
4,6-Dinitro-2-methylphenol	.15828	.16875	6.62		
N-Nitrosodiphenylamine	.44092	.44452	.82	*	
Azobenzene	.96408	1.41559	46.83		
4-Bromophenyl-phenylether	.17207	.19349	12.45		
Hexachlorobenzene	.16567	.17784	7.35		
Pentachlorophenol	.11530	.08148	29.33	*	
Phenanthrene	.67155	.76020	13.20		
Anthracene	.57330	.73673	28.51		
1,2-Diphenylhydrazine	.09676	.03241	66.51		
Di-n-Butylphthalate	.73792	1.13151	53.34		
Fluoranthene	.58244	.70483	21.01	*	
Benzidine	.43657	.16867	61.36		
Pyrene	1.74362	2.54023	45.69		

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 04/28/93

Contractor: Accredited Labs

Time: 09:47

Contract No:

Laboratory ID: >B1595

Instrument ID: HP5970BB

Initial Calibration Date: 04/27/93

Minimum $\overline{RF}$ for SPCC is 0.05

Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Terphenyl-d14	1.34506	1.67593	24.60		
Butylbenzylphthalate	1.13702	.98451	13.41		
3,3'-Dichlorobenzidine	.30089	.26796	10.94		
Benzo(a)Anthracene	1.03584	1.16525	12.49		
Bis(2-Ethylhexyl)Phthalate	1.21363	1.21021	.28		
Chrysene	.80036	.95600	19.45		
Di-n-octyl phthalate	3.54848	3.22837	9.02	*	
Benzo(b)fluoranthene	1.40226	1.45988	4.11		
Benzo(k)Fluoranthene	1.27157	.61632	51.53		
Benzo(a)Pyrene	.92074	.87037	5.47	*	
Indeno(1,2,3-cd)Pyrene	.49789	.36145	27.40		
Dibenzo(a,h)Anthracene	.42348	.29323	30.76		
Benzo(g,h,i)Perylene	.30759	.24137	21.53		

RF - Response Factor from daily standard file at 50.00 ug/l

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILE MATRIX SPIKE RECOVERY

Matrix Spike Sample No.: 9302298

Date Extracted:

Data File: >E2634

COMPOUND	SPIKE ADDED (mg/l)	SAMPLE CONCENTRATION (mg/l)	MS CONCENTRATION (mg/l)	MS % REC
Pyridine	.100	.000	.072	72
1,4-Dichlorobenzene	.100	.000	.072	72
2-Methylphenol	.100	.000	.087	87
3&4-Methylphenol	.200	.000	.167	84
Hexachloroethane	.100	.000	.070	70
Nitrobenzene	.100	.000	.079	79
Hexachlorobutadiene	.100	.000	.068	68
2,4,6-Trichlorophenol	.100	.000	.093	93
2,4,5-Trichlorophenol	.100	.000	.100	100
2,4-Dinitrotoluene	.100	.000	.095	95
Hexachlorobenzene	.100	.000	.085	85
Pentachlorophenol	.100	.000	.158	158

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	SBLK77	DILUTION FACTOR	10
DATA FILE	>B1597	DATE EXTRACTED	04/22/93
CLIENT NAME		DATE ANALYZED	04/28/93
FIELD ID		ANALYZED BY	PAUL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	59 %	21 - 100	OK
Phenol-d5	64 %	10 - 94	OK
Nitrobenzene-d5	59 %	35 - 114	OK
2-Fluorobiphenyl	78 %	43 - 116	OK
2,4,6-Tribromophenol	61 %	10 - 123	OK
Terphenyl-d14	81 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK70

Lab Name: ACCREDITED LABS, INC. Contract: CONTRACT

Lab Code: Case No.: SAS No.: SDG No.:

Lab File ID: >F4314 Lab Sample ID: SBLK70

Instrument ID: HP5970BF Date Extracted: 04/09/93

Matrix: (soil/water) WATER Date Analyzed: 04/13/93

Level: (low/med) LOW Time Analyzed: 20:24

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01		9302298MS	>E2634	04/17/93
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
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COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK77

Lab Name: ACCREDITED LABS, INC. Contract: CONTRACT

Lab Code: Case No.: SAS No.: SDG No.:

Lab File ID: >B1597 Lab Sample ID: SBLK77

Instrument ID: HP5970BB Date Extracted: 04/22/93

Matrix: (soil/water) WATER Date Analyzed: 04/28/93

Level: (low/med) LOW Time Analyzed: 11:34

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01		9302527	>B1599	04/28/93
02		9302529	>B1601	04/28/93
03		9302528	>B1603	04/28/93
04				
05				
06				
07				
08				
09				
10				
11				
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COMMENTS:

FORM IV SV 3/90

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Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: GC/ECD #1

Contractor: ACCREDITED LABS INC.

Calibration Date: 07/16/92

Contract No:

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % RSD for CCC is 20%

Comp No.	Compound	RF 1.00 (>A4138)	RF 10.00 (>A4137)	RF 25.00 (>A4136)	RF 50.00 (>A4135)	RF 100.00 (>A4134)	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
1)	Aroclor-1016 Peak 1	18860.0	15724.6	14402.2	12200.6	11316.9	7.160	14500.8	20.671	.997803			
2)	Aroclor-1016 Peak 2	48847.0	44343.8	41205.6	35976.4	33759.0	8.073	40826.4	15.015	.998515			
3)	Aroclor-1016 Peak 3	21122.0	18382.1	17171.6	14833.5	13926.6	8.407	17087.2	16.818	.998399			
4)	Aroclor-1221 Peak 1	4327.00	3760.80	3512.60	2988.00	2632.64	3.110	3444.21	19.210	.995855			
5)	Aroclor-1221 Peak 2	6303.00	5907.20	5694.08	4917.90	4360.24	4.927	5436.48	14.443	.996336			
6)	Aroclor-1221 Peak 3	16651.0	13590.3	12436.6	10503.8	9378.17	5.360	12512.0	22.660	.996408			
7)	Aroclor-1232 Peak 1	74735.0	59861.2	55999.4	50064.8	48217.8	5.347	57775.6	18.275	.999323			
8)	Aroclor-1232 Peak 2	48632.0	41042.2	37320.1	32103.3	29201.9	7.147	37659.9	20.325	.997454			
9)	Aroclor-1232 Peak 3	137375.	116718.	110021.	98848.2	94091.9	8.050	111411.	15.298	.999171			
10)	Aroclor-1242 Peak 1	10552.0	9757.50	8861.68	7684.76	6718.17	7.120	8714.82	17.713	.995825			
11)	Aroclor-1242 Peak 2	30711.0	27374.3	24985.0	22005.4	19638.0	8.023	24942.7	17.470	.997071			
12)	Aroclor-1242 Peak 3	12464.0	11395.0	10486.8	9247.26	8239.88	8.357	10366.6	16.175	.996997			
13)	Aroclor-1248 Peak 1	26903.0	24929.4	22545.8	19794.5	17902.5	8.030	22415.0	16.348	.997507			
14)	Aroclor-1248 Peak 2	21064.0	18124.0	16917.4	15043.5	13690.4	10.410	16967.9	16.815	.997943			
15)	Aroclor-1248 Peak 3	9463.00	8854.30	8365.72	6927.02	6524.17	13.933	8026.84	15.672	.997664			
16)	Aroclor-1254 Peak 1	21328.0	18880.5	18096.3	14523.0	13419.6	13.973	17249.5	18.811	.996390			
17)	Aroclor-1254 Peak 2	27711.0	23450.8	21989.4	18865.5	16728.7	15.027	21749.1	19.510	.996353			
18)	Aroclor-1254 Peak 3	24827.0	21769.4	21679.0	18927.7	17301.8	17.020	20901.0	13.871	.997728			
19)	Aroclor-1260 Peak 1	42834.0	36140.6	32765.5	29030.4	26735.4	15.957	33501.2	18.901	.998290			
20)	Aroclor-1260 Peak 2	41703.0	36280.1	35234.3	31682.4	30640.6	17.030	35108.1	12.463	.999385			
21)	Aroclor-1260 Peak 3	53127.0	51672.8	52904.8	48367.0	46841.6	19.790	50582.6	5.588	.999476			
22)	DBC	355135.	475422.	449672.	428333.	445436.	20.700	430800.	10.569	.998030			(Conc=1.00,2

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 04/20/93

Contractor: ACCREDITED LABS INC.

Time: 15:06

Contract No:

Laboratory ID: >A6011

Instrument ID: GC/ECD #1

Initial Calibration Date: 07/16/92

Minimum $\overline{RF}$ for SPCC is 10000

Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Aroclor-1016 Peak 1	14500.8	16201.6	11.73		
Aroclor-1016 Peak 2	40826.4	43853.2	7.41		
Aroclor-1016 Peak 3	17087.2	16851.8	1.38		
Aroclor-1221 Peak 1	3444.21	3796.12	10.22		
Aroclor-1221 Peak 2	5436.48	5956.80	9.57		
Aroclor-1221 Peak 3	12512.0	11865.0	5.17		
Aroclor-1232 Peak 1	57775.6	59538.0	3.05		
Aroclor-1232 Peak 2	37659.9	41724.9	10.79		
Aroclor-1232 Peak 3	111411.	111433.	.02		
Aroclor-1242 Peak 1	8714.82	9774.40	12.16		
Aroclor-1242 Peak 2	24942.7	25264.8	1.29		
Aroclor-1242 Peak 3	10366.6	9761.12	5.84		
Aroclor-1248 Peak 1	22415.0	24381.1	8.77		
Aroclor-1248 Peak 2	16967.9	16301.8	3.93		
Aroclor-1248 Peak 3	8026.84	7435.52	7.37		
Aroclor-1254 Peak 1	17249.5	16022.4	7.11		
Aroclor-1254 Peak 2	21749.1	21833.8	.39		
Aroclor-1254 Peak 3	20901.0	20505.9	1.89		
Aroclor-1260 Peak 1	33501.2	32292.1	3.61		
Aroclor-1260 Peak 2	35108.1	34072.9	2.95		
Aroclor-1260 Peak 3	50582.6	54916.4	8.57		
DBC	430800.	375932.	12.74	(Conc=1.00)	

RF - Response Factor from daily standard file at 25.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 04/21/93

Contractor: ACCREDITED LABS INC.

Time: 05:48

Contract No:

Laboratory ID: >A6036

Instrument ID: GC/ECD #1

Initial Calibration Date: 07/16/92

Minimum $\overline{RF}$ for SPCC is 10000

Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Aroclor-1016 Peak 1	14500.8	15712.6	8.36		
Aroclor-1016 Peak 2	40826.4	41488.9	1.62		
Aroclor-1016 Peak 3	17087.2	15087.6	11.70		
Aroclor-1221 Peak 1	3444.21	-	-		
Aroclor-1221 Peak 2	5436.48	-	-		
Aroclor-1221 Peak 3	12512.0	-	-		
Aroclor-1232 Peak 1	57775.6	-	-		
Aroclor-1232 Peak 2	37659.9	-	-		
Aroclor-1232 Peak 3	111411.	-	-		
Aroclor-1242 Peak 1	8714.82	-	-		
Aroclor-1242 Peak 2	24942.7	-	-		
Aroclor-1242 Peak 3	10366.6	-	-		
Aroclor-1248 Peak 1	22415.0	-	-		
Aroclor-1248 Peak 2	16967.9	-	-		
Aroclor-1248 Peak 3	8026.84	-	-		
Aroclor-1254 Peak 1	17249.5	-	-		
Aroclor-1254 Peak 2	21749.1	-	-		
Aroclor-1254 Peak 3	20901.0	-	-		
Aroclor-1260 Peak 1	33501.2	29273.7	12.62		
Aroclor-1260 Peak 2	35108.1	30787.2	12.31		
Aroclor-1260 Peak 3	50582.6	52132.1	3.06		
DBC	430800.	-	-	(Conc=1.00)	

RF - Response Factor from daily standard file at 25.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

INSTRUMENT ID: HP5890-A GC #1
DATE(S) ANALYZED: 07/16/92 to 07/17/92

RETENTION TIMES

ANALYTE	0.10 ug/L	1.00 ug/L	2.50 ug/L	5.00 ug/L	10.00 ug/L
Aroclor-1016 Peak-1	7.17	7.17	7.17	7.15	7.15
Aroclor-1016 Peak-2	8.08	8.08	8.07	8.07	8.07
Aroclor-1016 Peak-3	8.42	8.42	8.40	8.40	8.40
Aroclor-1221 Peak-1	3.10	3.12	3.10	3.12	3.12
Aroclor-1221 Peak-2	4.92	4.93	4.92	4.93	4.93
Aroclor-1221 Peak-3	5.35	5.37	5.35	5.37	5.37
Aroclor-1232 Peak-1	5.33	5.35	5.35	5.33	5.37
Aroclor-1232 Peak-2	7.13	7.15	7.15	7.13	7.17
Aroclor-1232 Peak-3	8.03	8.05	8.05	8.05	8.07
Aroclor-1242 Peak-1	7.12	7.12	7.13	7.10	7.13
Aroclor-1242 Peak-2	8.03	8.02	8.03	8.00	8.03
Aroclor-1242 Peak-3	8.37	8.35	8.37	8.33	8.37
Aroclor-1248 Peak-1	8.05	8.02	8.03	8.02	8.03
Aroclor-1248 Peak-2	10.43	10.38	10.43	10.38	10.42
Aroclor-1248 Peak-3	13.97	13.90	13.95	13.90	13.95
Aroclor-1254 Peak-1	13.97	13.98	13.97	13.97	13.98
Aroclor-1254 Peak-2	15.02	15.03	15.02	15.02	15.05
Aroclor-1254 Peak-3	17.02	17.02	17.02	17.00	17.05
Aroclor-1260 Peak-1	15.97	15.97	15.95	15.95	15.95
Aroclor-1260 Peak-2	17.03	17.03	17.03	17.03	17.02
Aroclor-1260 Peak-3	19.80	19.80	19.78	19.78	19.78

ANALYTE	RT WINDOW	FROM	TO
Aroclor-1016 Peak-1	0.070	7.09	7.23
Aroclor-1016 Peak-2	0.070	8.00	8.14
Aroclor-1016 Peak-3	0.070	8.34	8.48
Aroclor-1221 Peak-1	0.070	3.04	3.18
Aroclor-1221 Peak-2	0.070	4.86	5.00
Aroclor-1221 Peak-3	0.070	5.29	5.43
Aroclor-1232 Peak-1	0.070	5.28	5.42
Aroclor-1232 Peak-2	0.070	7.08	7.22
Aroclor-1232 Peak-3	0.070	7.98	8.12
Aroclor-1242 Peak-1	0.070	7.05	7.19
Aroclor-1242 Peak-2	0.070	7.95	8.09
Aroclor-1242 Peak-3	0.070	8.29	8.43
Aroclor-1248 Peak-1	0.070	7.96	8.10
Aroclor-1248 Peak-2	0.070	10.34	10.48
Aroclor-1248 Peak-3	0.070	13.86	14.00
Aroclor-1254 Peak-1	0.070	13.90	14.04
Aroclor-1254 Peak-2	0.070	14.96	15.10
Aroclor-1254 Peak-3	0.070	16.95	17.09
Aroclor-1260 Peak-1	0.070	15.89	16.03
Aroclor-1260 Peak-2	0.070	16.96	17.10
Aroclor-1260 Peak-3	0.070	19.72	19.86

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

INSTRUMENT ID: HP5890-A GC #1
DATE(S) ANALYZED: 04/20/93

ANALYTE	RT OF STD	WINDOW FROM	TO
Aroclor-1016 Peak-1	6.52	6.45	6.59
Aroclor-1016 Peak-2	7.42	7.35	7.49
Aroclor-1016 Peak-3	7.73	7.66	7.80
Aroclor-1221 Peak-1	2.70	2.63	2.77
Aroclor-1221 Peak-2	4.37	4.30	4.44
Aroclor-1221 Peak-3	4.77	4.70	4.84
Aroclor-1232 Peak-1	4.77	4.70	4.84
Aroclor-1232 Peak-2	6.45	6.38	6.52
Aroclor-1232 Peak-3	7.35	7.28	7.42
Aroclor-1242 Peak-1	6.43	6.36	6.50
Aroclor-1242 Peak-2	7.33	7.26	7.40
Aroclor-1242 Peak-3	7.63	7.56	7.70
Aroclor-1248 Peak-1	7.35	7.28	7.42
Aroclor-1248 Peak-2	9.63	9.56	9.70
Aroclor-1248 Peak-3	13.10	13.03	13.17
Aroclor-1254 Peak-1	13.10	13.03	13.17
Aroclor-1254 Peak-2	14.20	14.13	14.27
Aroclor-1254 Peak-3	16.15	16.08	16.22
Aroclor-1260 Peak-1	15.17	15.10	15.24
Aroclor-1260 Peak-2	16.23	16.16	16.30
Aroclor-1260 Peak-3	18.98	18.91	19.05

2F
SOIL PCB SURROGATE RECOVERY

Lab Name: ACCREDITED LABS, INC. Contract: _____

Lab code: _____ Case No.: 2927 SAS No.: _____ SDG No.: _____

GC Column(1): RTX-5 ID: 0.53 (mm)

	LAB FILE ID	TCX %REC #	DBC %REC #	TOT OUT
01	PBLK55	85	74	0
02	9302527	109	7 *	1
03	9302528	109	2 *	1
04	9302529	91	0 *	1
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(60-150)
DBC = Dibutylchlorendate	(20-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

8D
PCB ANALYTICAL SEQUENCE

Lab Name: ACCREDITED LABS, INC. Contract: _____

Lab Code: _____ Case No.: 2927 SAS NO.: _____ SDG No: _____

GC Column: RTX-5 ID: 0.53 (mm)

Instrument ID: HP5890-A

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 3.83 DBC: 19.73

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DBC RT #
01	>A6017	PBLK55	04/20/93	18:38	3.85	19.77
02	>A6022	9302527	04/20/93	21:34	3.87	19.77
03	>A6023	9302528	04/20/93	22:09	3.87	19.78
04	>A6024	9302529	04/20/93	22:45	3.85	0.00 *
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

	QC LIMITS
TCX = Tetrachloro-m-xylene	(± 0.05 MINUTES)
DBC = Dibutylchlorendate	(± 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

ACCREDITED LABORATORIES, INC.
SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample Number: PBLK45

Sample Data File: >A5918

Date Extracted: 04/06/93

MS Data File: >A5941

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC ** LIMITS REC
Aroclor-1260	333	0.000	298	89	40-140

MSD Data File: >A5942

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS ** RPD	QC LIMITS ** REC
Aroclor-1260	333	310	93	4	25	40-140

Column used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

** Values were generated within ALI for advisory purposes only

COMMENTS: _____

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK55	DILUTION FACTOR	1
DATA FILE	>A6017	DATE EXTRACTED	04/19/93
CLIENT NAME		DATE ANALYZED	04/20/93
FIELD ID		ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
126741	Aroclor-1016	U	33.3
111042	Aroclor-1221	U	66.7
111411	Aroclor-1232	U	33.3
534692	Aroclor-1242	U	33.3
126722	Aroclor-1248	U	33.3
110976	Aroclor-1254	U	33.3
110968	Aroclor-1260	U	33.3

Percent Solid of 100. is used for all Target compounds.

(J) Indicates detected below MDL
(U) Indicates compound analyzed for but not detected

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS
INITIAL AND CONTINUING CALIBRATION VERIFICATION

ALI QC #: 930424T

Initial Calibration Source: PE484/LEEMAN

Continuing Calibration Source: ALI

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Arsenic	10000.0	10300.00	103.0	5000.0	5010.00	100.2	5120.00	102.4	P
Barium	10000.0	10000.00	100.0	5000.0	4860.00	97.2	5070.00	101.4	P
Cadmium	10000.0	10100.00	101.0	5000.0	4790.00	95.8	4920.00	98.4	P
Chromium	10000.0	9700.00	97.0	5000.0	4490.00	89.8	4660.00	93.2	P
Copper	10000.0	10100.00	101.0	5000.0	4830.00	96.6	5050.00	101.0	P
Lead	10000.0	10200.00	102.0	5000.0	4920.00	98.4	5160.00	103.2	P
Mercury	2.0	2.03	101.5	2.0	2.03	101.5	2.08	104.0	CV
Nickel	10000.0	10100.00	101.0	5000.0	4700.00	94.0	4880.00	97.6	P
Selenium	10000.0	10200.00	102.0	5000.0	4800.00	96.0	4910.00	98.2	P
Silver	1000.0	984.00	98.4	500.0	486.00	97.2	501.00	100.2	P
Thallium	10000.0	10100.00	101.0	5000.0	4850.00	97.0	4970.00	99.4	P
Zinc	10000.0	10100.00	101.0	5000.0	4690.00	93.8	4790.00	95.8	P

Control Limits: Mercury 80-120; ICP Metals 90-110; GFA 80-120; CN 85-115

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS
INITIAL AND CONTINUING CALIBRATION VERIFICATION

ALI QC #: 930424T

Initial Calibration Source: PE484/LEEMAN

Continuing Calibration Source: ALI_____

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Arsenic				5000.0	5200.00	104.0			P
Barium				5000.0	5030.00	100.6			P
Cadmium				5000.0	5040.00	100.8			P
Chromium				5000.0	4820.00	96.4			P
Copper				5000.0	5030.00	100.6			P
Lead				5000.0	5230.00	104.6			P
Mercury									NR
Nickel				5000.0	4930.00	98.6			P
Selenium				5000.0	5030.00	100.6			P
Silver				500.0	504.00	100.8			P
Thallium				5000.0	5150.00	103.0			P
Zinc				5000.0	4930.00	98.6			P

Control Limits: Mercury 80-120; ICP Metals 90-110; GFA 80-120; CN 85-115

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS
BLANKS

ALI QC #: 930424T

Preparation Blank Matrix (soil/extract): EXTRACT

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Arsenic	-82.2	B	-89.3	B	44.0	U	-144.0	B	-52.300	B	P
Barium	-20.4	B	-21.1	B	-21.2	B	-21.1	B	-20.700	B	P
Cadmium	-9.4	B	4.0	U	4.8	B	4.0	U	4.000	U	P
Chromium	10.0	U	-10.6	B	10.0	U	25.4	B	17.200	B	P
Copper	8.0	U	8.0	U	8.0	U	8.0	U	8.000	U	P
Lead	-135.0	B	124.0	B	297.0	B	85.0	U	85.000	U	P
Mercury	0.2	U	0.2	U	0.2	U			0.155	U	CV
Nickel	14.0	U	29.1	B	43.4	B	25.8	B	-17.000	B	P
Selenium	133.0	U	133.0	U	133.0	U	133.0	U	133.000	U	P
Silver	7.0	U	7.0	U	7.0	U	7.0	U	7.000	U	P
Thallium	258.0	B	151.0	U	151.0	U	233.0	B	151.000	U	P
Zinc	13.0	U	13.0	U	13.0	U	13.0	U	13.000	U	P

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FORM III - IN

3/90

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS
SPIKE SAMPLE RECOVERY

ALI QC SAMPLE#

2530A

ALI QC #: 930424T

Matrix (soil/extract): EXTRACT

Concentration Units (ug/L) : UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75-125	5180.0000		65.7000	B	5000.00	102.3		P
Barium	75-125	5310.0000		593.0000		5000.00	94.3		P
Cadmium	75-125	935.0000		43.8000		1000.00	89.1		P
Chromium	75-125	1800.0000		10.0000	U	2000.00	90.0		P
Copper	75-125	3910.0000		1460.0000		2500.00	98.0		P
Lead		13900.0000		10100.0000		2500.00	152.0		P
Mercury									NR
Nickel	75-125	2700.0000		439.0000		2500.00	90.4		P
Selenium	75-125	5030.0000		133.0000	U	5000.00	100.6		P
Silver	75-125	57.1000		7.0000	U	50.00	114.2		P
Thallium	75-125	4390.0000		151.0000	U	5000.00	87.8		P
Zinc	75-125	15300.0000		9710.0000		5000.00	111.8		P

Comments:

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS
DUPLICATES

ALI QC SAMPLE#

2530D

ALI QC #: 930424T

Matrix (soil/extract): EXTRACT

Concentration Units (ug/L) : UG/L

Analyte	Regulatory Level	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		65.7000	B	113.0000	B	52.9		P
Barium	500.0	593.0000		626.0000		5.4		P
Cadmium	30.0	43.8000		57.6000		27.2		P
Chromium		10.0000	U	27.9000	B	200.0		P
Copper		1460.0000		1540.0000		5.3		P
Lead		10100.0000		11100.0000		9.4		P
Mercury								NR
Nickel	100.0	439.0000		466.0000		6.0		P
Selenium		133.0000	U	133.0000	U			P
Silver		7.0000	U	7.0000	U			P
Thallium	300.0	151.0000	U	473.0000		200.0		P
Zinc		9710.0000		10300.0000		5.9		P

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ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS
LABORATORY CONTROL SAMPLE

ALI QC #: 930424T

Solid LCS Source: _____

Aqueous LCS Source: ALI_____

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Arsenic	5000.00	5300.00	106.0						
Barium	5000.00	5000.00	100.0						
Cadmium	1000.00	958.00	95.8						
Chromium	2000.00	1880.00	94.0						
Copper	2500.00	2470.00	98.8						
Lead	2500.00	2670.00	106.8						
Mercury									
Nickel	2500.00	2460.00	98.4						
Selenium	5000.00	4730.00	94.6						
Silver	50.00	47.50	95.0						
Thallium	5000.00	5050.00	101.0						
Zinc	5000.00	4950.00	99.0						

ACCREDITED LABORATORIES INC.

REGULATED TCLP METALS
ICP SERIAL DILUTION

ALI QC SAMPLE#

2530L

ALI QC #: 930424T

Matrix (soil/extract): EXTRACT

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	65.70	B	220.00	U	100.0		P
Barium	593.00		560.00	B	5.6		P
Cadmium	43.80		20.00	U	100.0		P
Chromium	10.00	U	113.00	B			P
Copper	1460.00		1555.00		6.5		P
Lead	10100.00		11650.00		15.3		P
Mercury							
Nickel	439.00		620.00		41.2		P
Selenium	133.00	U	665.00	U			P
Silver	7.00	U	35.00	U			P
Thallium	151.00	U	1440.00	B			P
Zinc	9710.00		10050.00		3.5		P

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FORM IX - IN

ILMO2.1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Accredited Laboratories Inc.

DATE: April 16, 1993

Concentration Units: mg/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Tin									
Vanadium									
Zinc									
Cyanide	0.400	0.427	106.8	0.400	0.428	107.0			C

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Form II

BLANKS

Accredited Laboratories Inc.

DATE: April 16, 1993

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (mg/L or mg/kg): mg/kg

Analyte	Initial Calib. Blank (mg/L)	C	Continuing Calibration Blank (mg/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Tin											
Vanadium											
Zinc											
Cyanide	0.01	U	0.01	U					0.20	U	C

FORM III

SPIKE SAMPLE RECOVERY

Accredited Laboratories Inc. QC Report #: 930330CN

DATE: April 16, 1993 QC Sample ID: 9302114

Matrix (soil/water): Soil

% Solid for Sample: 94.8

Concentration Units (mg/L or mg/kg dry weight): mg/kg

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spiked Added (SA)	%R	Q	M
Aluminum	75-125								
Antimony	75-125								
Arsenic	75-125								
Barium	75-125								
Beryllium	75-125								
Cadmium	75-125								
Chromium	75-125								
Cobalt	75-125								
Copper	75-125								
Iron	75-125								
Lead	75-125								
Magnesium	75-125								
Manganese	75-125								
Mercury	75-125								
Nickel	75-125								
Potassium	75-125								
Selenium	75-125								
Silver	75-125								
Sodium	75-125								
Thallium	75-125								
Tin	75-125								
Vanadium	75-125								
Zinc	75-125								
Cyanide	75-125	4.09		0.21	U	5.27	77.6		C

Comments:

Duplicates

Accredited Laboratories Inc. QC Report #: 930330CN

Date: April 16, 1993 QC Sample ID: 9302114

Matrix (soil/water): Soil

% Solid for Sample: 94.8

Concentration Units (mg/L or mg/kg dry weight): mg/kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Tin								
Vanadium								
Zinc								
Cyanide		0.21	U	0.21	U	0.00		C

FORM VI

QUANT REPORT

Operator ID: LARRY
Output File: ^D0202::QT
Data File: >D0202::D1
Name: DAILY BLANK
Misc:

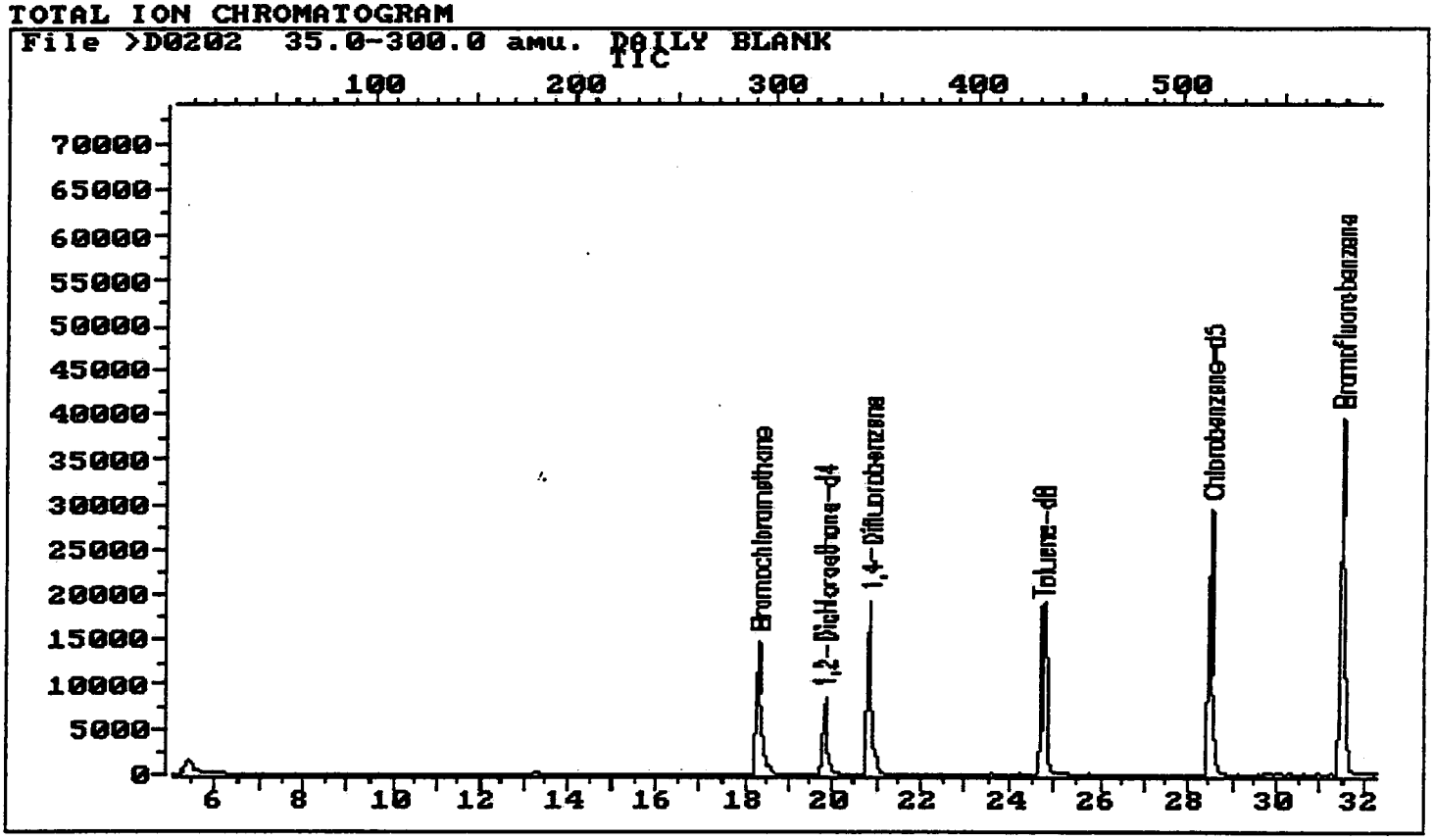
Quant Rev: 6
Quant Time: 930427 13:08
Injected at: 930427 12:35
Dilution Factor: 1.00000

ID File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930427 13:04

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	18.34	292	20220	50.00	ug/l	93
18)	1,2-Dichloroethane-d4	19.85	325	23870	43.10	ug/l	98
20)	*1,4-Difluorobenzene	20.86	347	56816	50.00	ug/l	100
36)	*Chlorobenzene-d5	28.53	515	51322	50.00	ug/l	100
41)	Toluene-d8	24.74	432	50998	48.59	ug/l	99
44)	Bromofluorobenzene	31.49	580	46640	51.75	ug/l	87

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D0202::D1 Quant Output File: ^D0202::QT
Name: DAILY BLANK
Misc:

Id File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930427 13:04

Operator ID: LARRY
Quant Time: 930427 13:08
Injected at: 930427 12:35

QUANT REPORT

Operator ID: LARRY
Output File: ^D0223::QT
Data File: >D0223::D1
Name: DAILY BLANK
Misc:

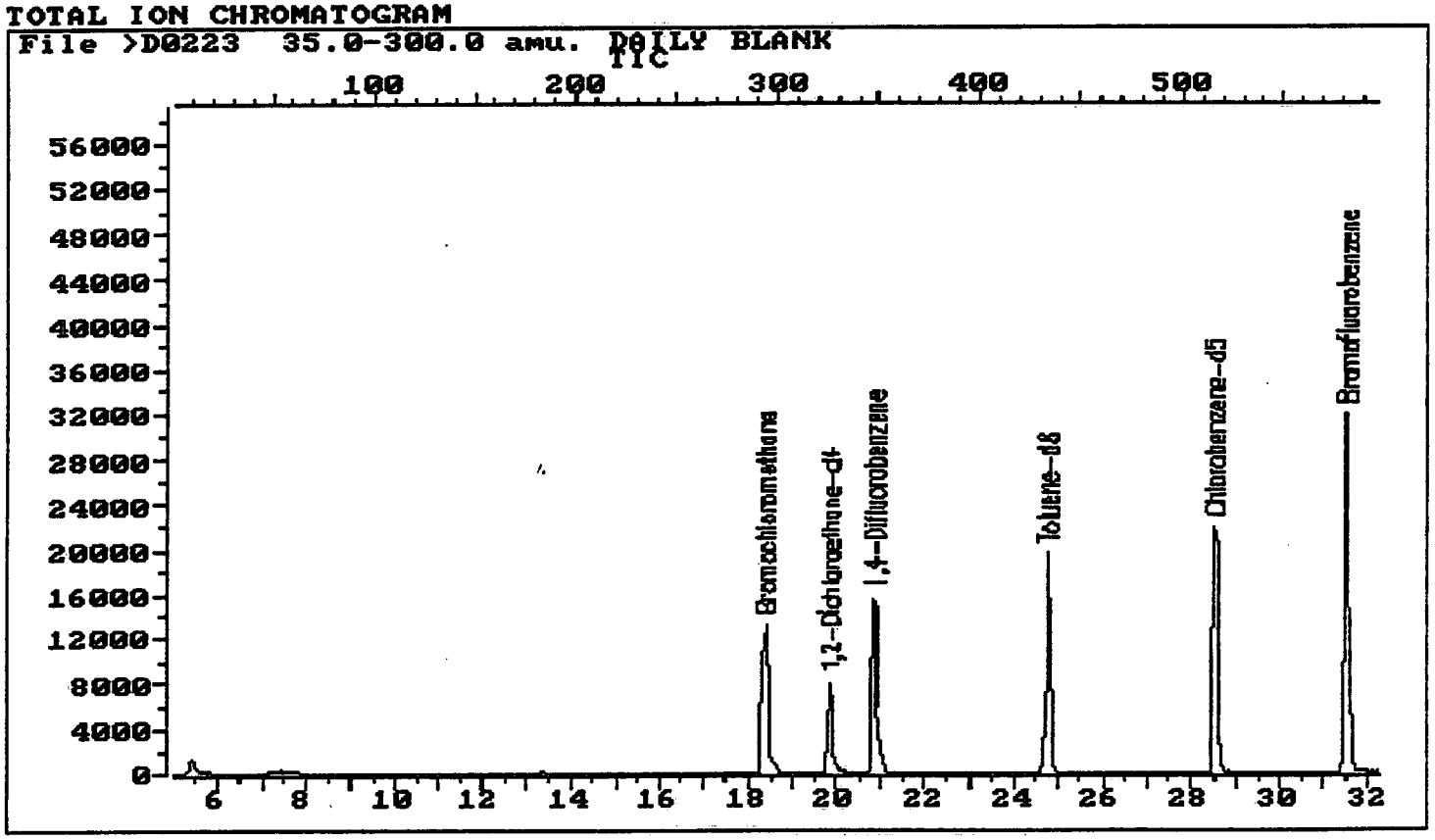
Quant Rev: 6
Quant Time: 930428 09:22
Injected at: 930428 08:48
Dilution Factor: 1.00000

ID File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930428 07:54

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	18.39	294	16558	50.00	ug/l	94
18)	1,2-Dichloroethane-d4	19.85	326	22096	48.73	ug/l	97
20)	*1,4-Difluorobenzene	20.85	348	49895	50.00	ug/l	100
36)	*Chlorobenzene-d5	28.52	516	42606	50.00	ug/l	100
41)	Toluene-d8	24.78	434	44709	51.32	ug/l	92
44)	Bromofluorobenzene	31.54	582	35108	46.93	ug/l	68

* Compound is ISTD

TOTAL ION CHROMATOGRAM



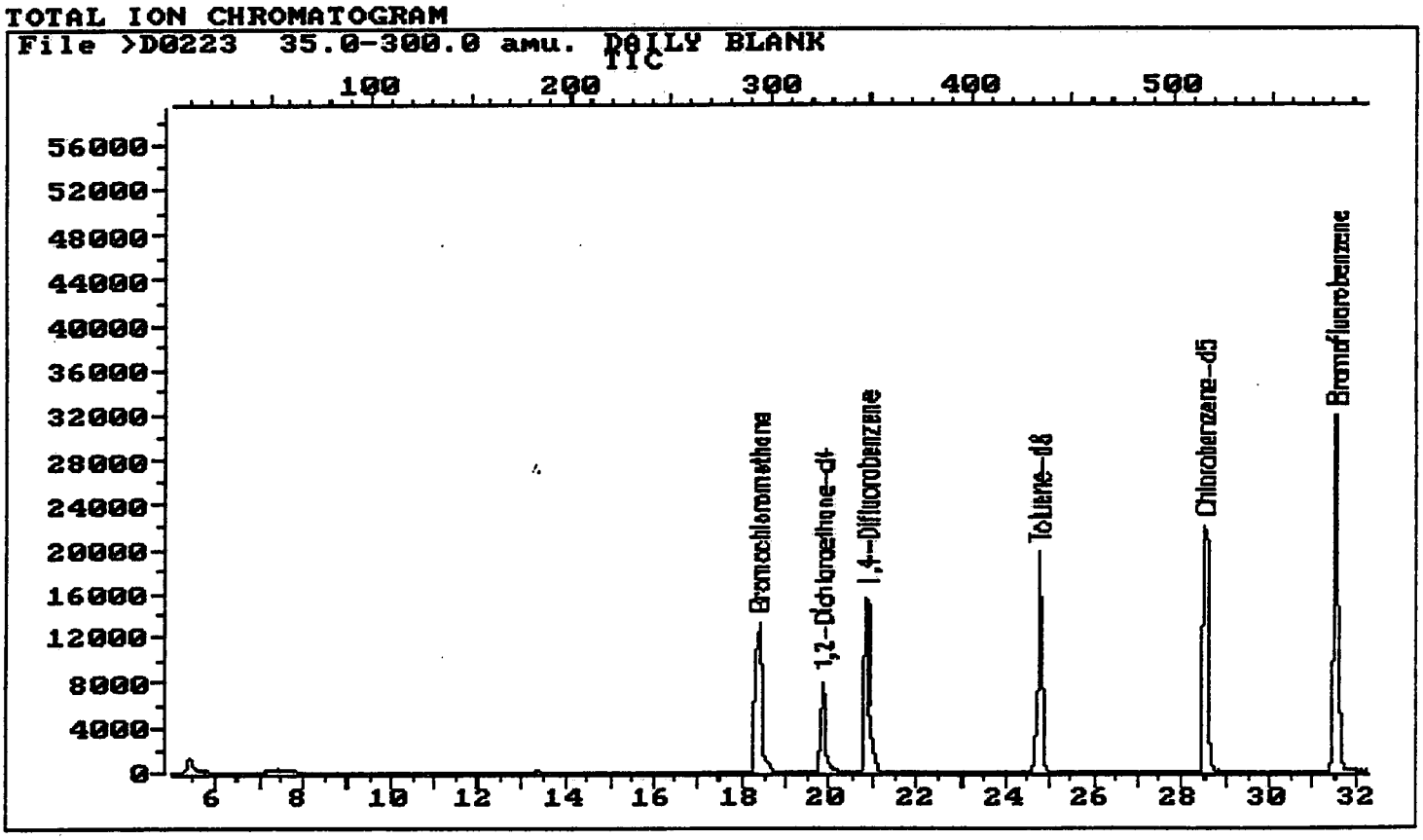
Data File: >D0223::D1 Quant Output File: ^D0223::QT
Name: DAILY BLANK
Misc:

Id File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930428 07:54

Operator ID: LARRY
Quant Time: 930428 09:22
Injected at: 930428 08:48

74

TOTAL ION CHROMATOGRAM



Data File: >D0223::D1 Quant Output File: ^D0223::QT
Name: DAILY BLANK
Misc:

Id File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930428 07:54

Operator ID: LARRY
Quant Time: 930428 09:22
Injected at: 930428 08:48

QUANT REPORT

Operator ID: LARRY Quant Rev: 6 Quant Time: 930428 12:09
Output File: ^D0227::QT Injected at: 930428 11:36
Data File: >D0227::D1 Dilution Factor: 1.00000
Name: 9302527
Misc: 2927 GES NL-5A

ID File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930428 07:54

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	18.36	293	12673	50.00	ug/l	99
8)	Methylene Chloride	13.34	183	1630	3.53	ug/l	95
9)	Acetone	11.29	138	887	10.53	ug/l	100
18)	1,2-Dichloroethane-d4	19.87	326	16638	47.94	ug/l	96
20)	*1,4-Difluorobenzene	20.88	348	43347	50.00	ug/l	100
36)	*Chlorobenzene-d5	28.55	516	36838	50.00	ug/l	100
41)	Toluene-d8	24.80	434	40682	54.01	ug/l	88
44)	Bromofluorobenzene	31.52	581	33522	51.82	ug/l	79
47)	m,p-Xylene	28.91	524	3839	4.09	ug/l	93

* Compound is ISTD

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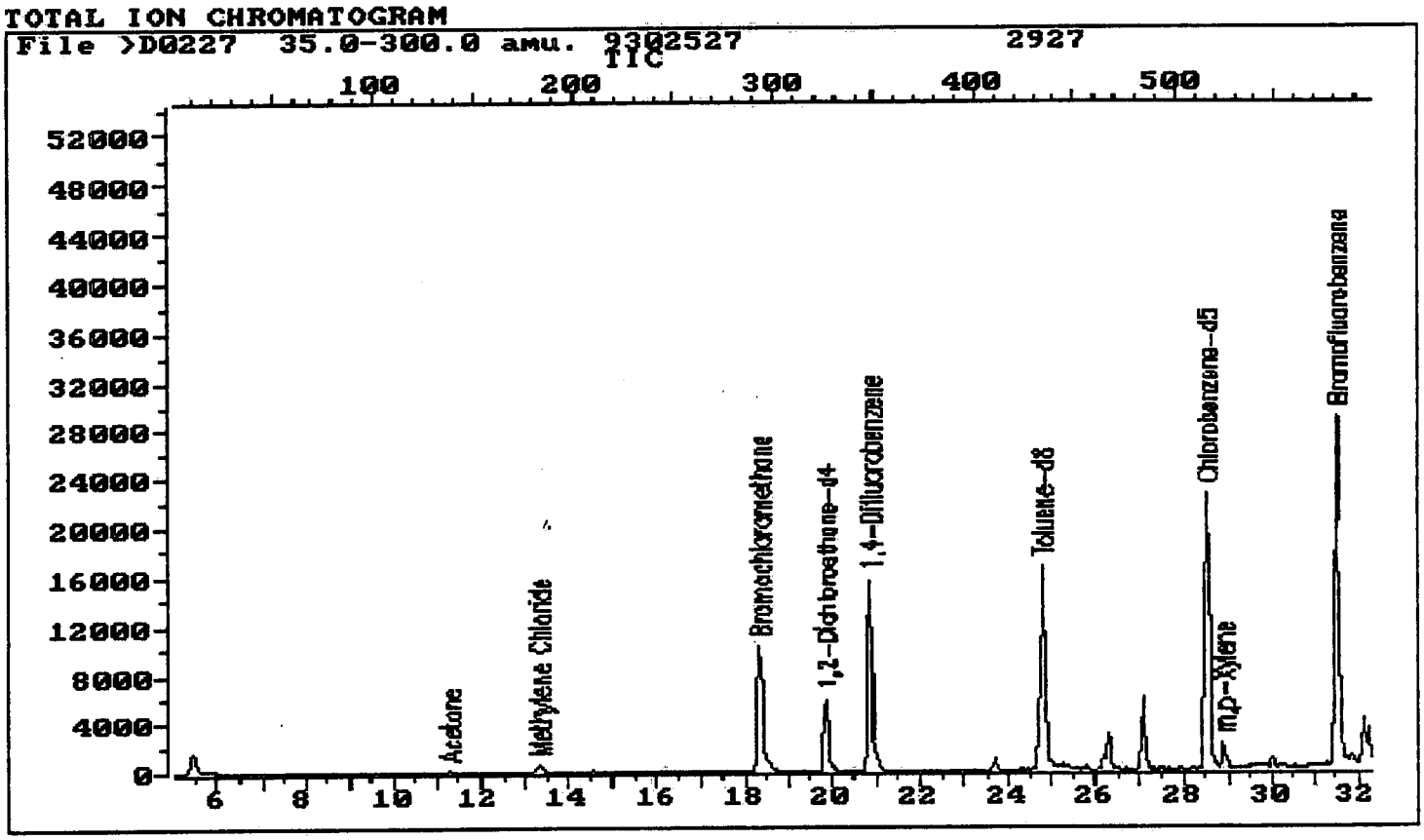
TOTAL ION CHROMATOGRAM



Data File: >D0227::D1 Quant Output File: ^D0227::QT
Name: 9302527
Misc: 2927 GES NL-5A

Id File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930428 07:54

Operator ID: LARRY
Quant Time: 930428 12:09
Injected at: 930428 11:36

QUANT REPORT

Operator ID: LARRY Quant Rev: 6 Quant Time: 930427 19:34
Output File: ^D0212::QT Injected at: 930427 19:00
Data File: >D0212::D1 Dilution Factor: 1.00000
Name: 9302528
Misc: 2927 GES NL-6

ID File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930427 13:04

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	18.35	292	11364	50.00	ug/l	91
8)	Methylene Chloride	13.33	182	1013	3.49	ug/l	88
9)	Acetone	11.27	137	611	12.34	ug/l	100
18)	1,2-Dichloroethane-d4	19.86	325	16423	52.77	ug/l	96
20)	*1,4-Difluorobenzene	20.86	347	35779	50.00	ug/l	100
36)	*Chlorobenzene-d5	28.53	515	35769	50.00	ug/l	100
41)	Toluene-d8	24.79	433	32933	45.03	ug/l	90
42)	Toluene	24.97	437	1277	1.33	ug/l	99
44)	Bromofluorobenzene	31.55	581	34666	55.19	ug/l	71
45)	Ethylbenzene	28.72	519	3766M	3.20	ug/l	66
47)	m,p-Xylene	28.90	523	8375	9.08	ug/l	94
48)	o-Xylene	30.00	547	3703	3.60	ug/l	96

* Compound is ISTD

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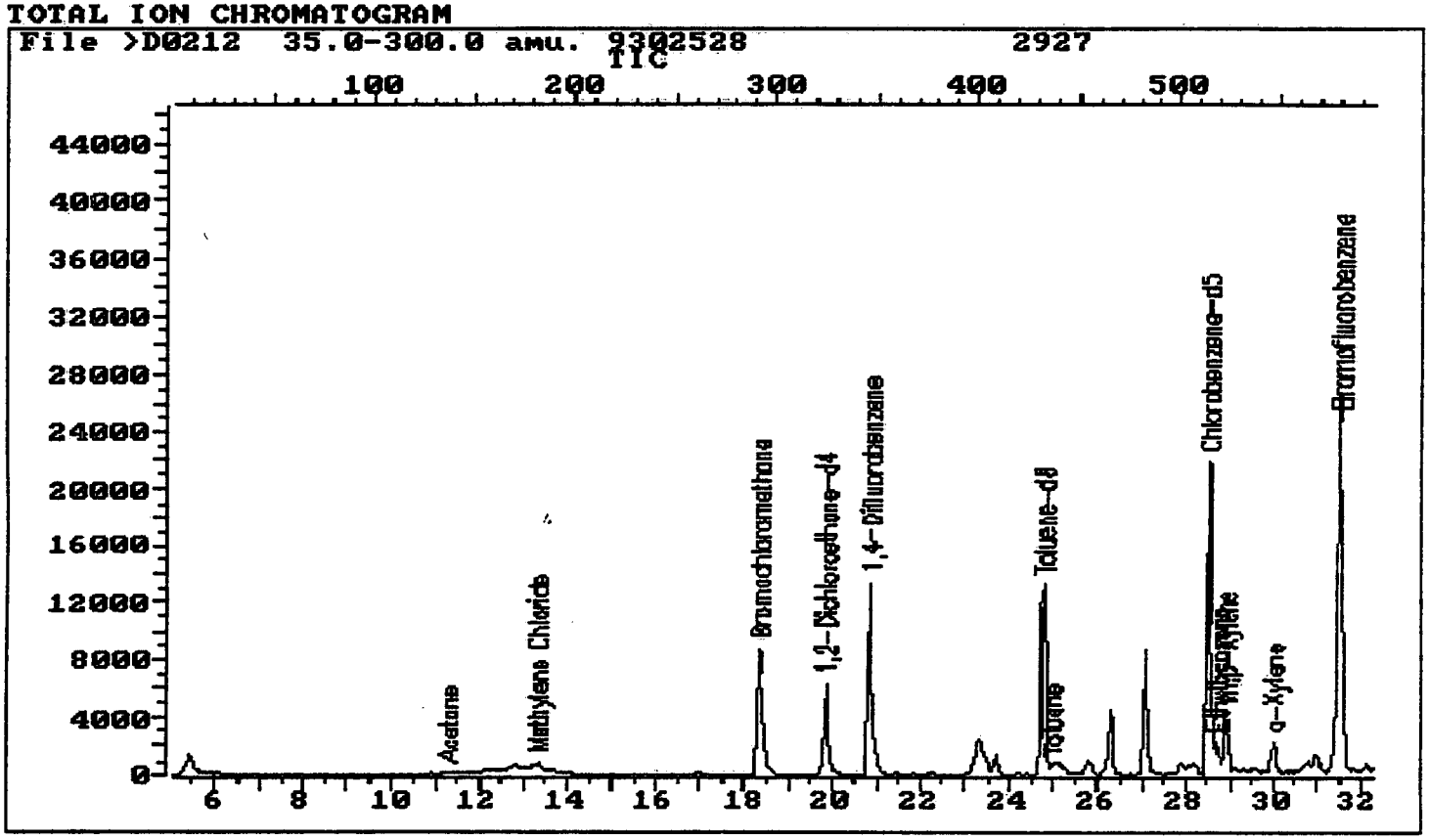
TOTAL ION CHROMATOGRAM



Data File: >D0212::D1 Quant Output File: ^D0212::QT
Name: 9302528
Misc: 2927 GES NL-6

Id File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930427 13:04

Operator ID: LARRY
Quant Time: 930427 19:34
Injected at: 930427 19:00

QUANT REPORT

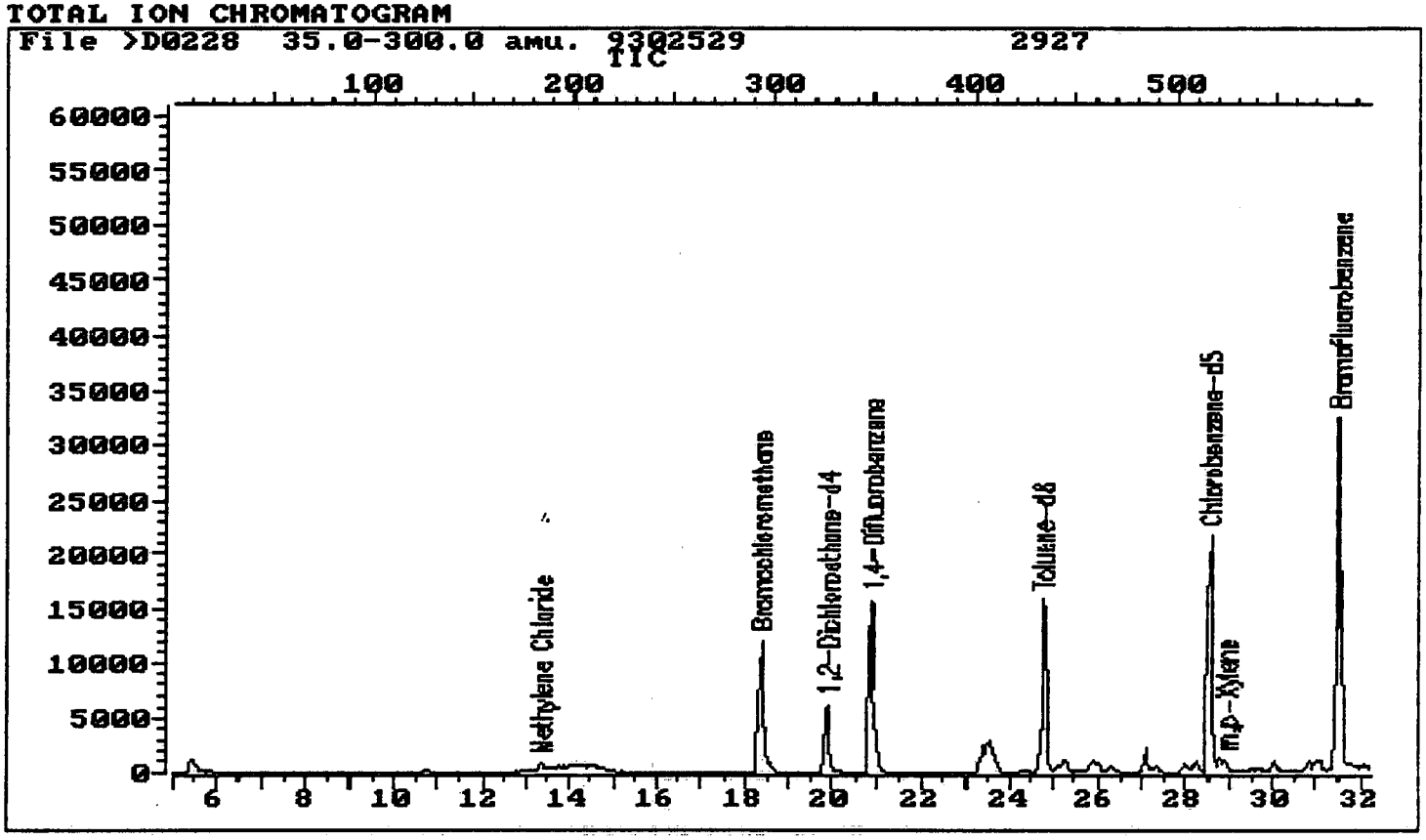
Operator ID: LARRY Quant Rev: 6 Quant Time: 930428 12:46
Output File: ^D0228::QT Injected at: 930428 12:13
Data File: >D0228::D1 Dilution Factor: 1.00000
Name: 9302529
Misc: 2927 GES NL-7

ID File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930428 07:54

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	18.37	294	13391	50.00	ug/l	85
8)	Methylene Chloride	13.35	184	1517	3.11	ug/l	93
18)	1,2-Dichloroethane-d4	19.88	327	17921	48.87	ug/l	97
20)	*1,4-Difluorobenzene	20.89	349	43397	50.00	ug/l	100
36)	*Chlorobenzene-d5	28.56	517	38356	50.00	ug/l	100
41)	Toluene-d8	24.77	434	39472	50.33	ug/l	89
44)	Bromofluorobenzene	31.53	582	33184	49.27	ug/l	77
47)	m,p-Xylene	28.92	525	1411	1.44	ug/l	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D0228::D1 Quant Output File: ^D0228::QT
Name: 9302529
Misc: 2927 GES NL-7

Id File: IDDA14::ME
Title: Accredited Labs Volatile Identity File
Last Calibration: 930428 07:54

Operator ID: LARRY
Quant Time: 930428 12:46
Injected at: 930428 12:13

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Operator ID: PAUL
Output File: ^B1597::QT
Data File: >B1597::G1
Name: SBLK77
Misc: 04/22/93

Quant Rev: 7
Quant Time: 930428 13:09
Injected at: 930428 11:34
Dilution Factor: 1.00000
Instrument ID: HP5970BB
BTL# 1

ID File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04
Last Qcal Time: 930427 17:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	11.04	181	63078	40.00	ug/l	90
4)	2-Fluorophenol	8.15	109	393564	118.46	ug/l	100
6)	Phenol-d5	10.52	168	540095	127.80	ug/l	85
19)	*d8-Naphthalene	14.26	261	260795	40.00	ug/l	90
20)	Nitrobenzene-d5	12.53	218	331841	59.22	ug/l	90
34)	*d10-Acenaphthene	18.85	375	157358	40.00	ug/l	93
39)	2-Fluorobiphenyl	17.16	333	489652	77.79	ug/l	97
54)	2,4,6-Tribromophenol	20.94	427	181861	122.88	ug/l	92
55)	*d10-Phenanthrene	22.67	470	412976	40.00	ug/l	100
67)	*d12-Chrysene	29.58	642	54821	40.00	ug/l	100
70)	Terphenyl-d14	26.89	575	375023	80.66	ug/l	84
76)	*d12-Perylene	33.68	744	14625	40.00	ug/l	100

* Compound is ISTD

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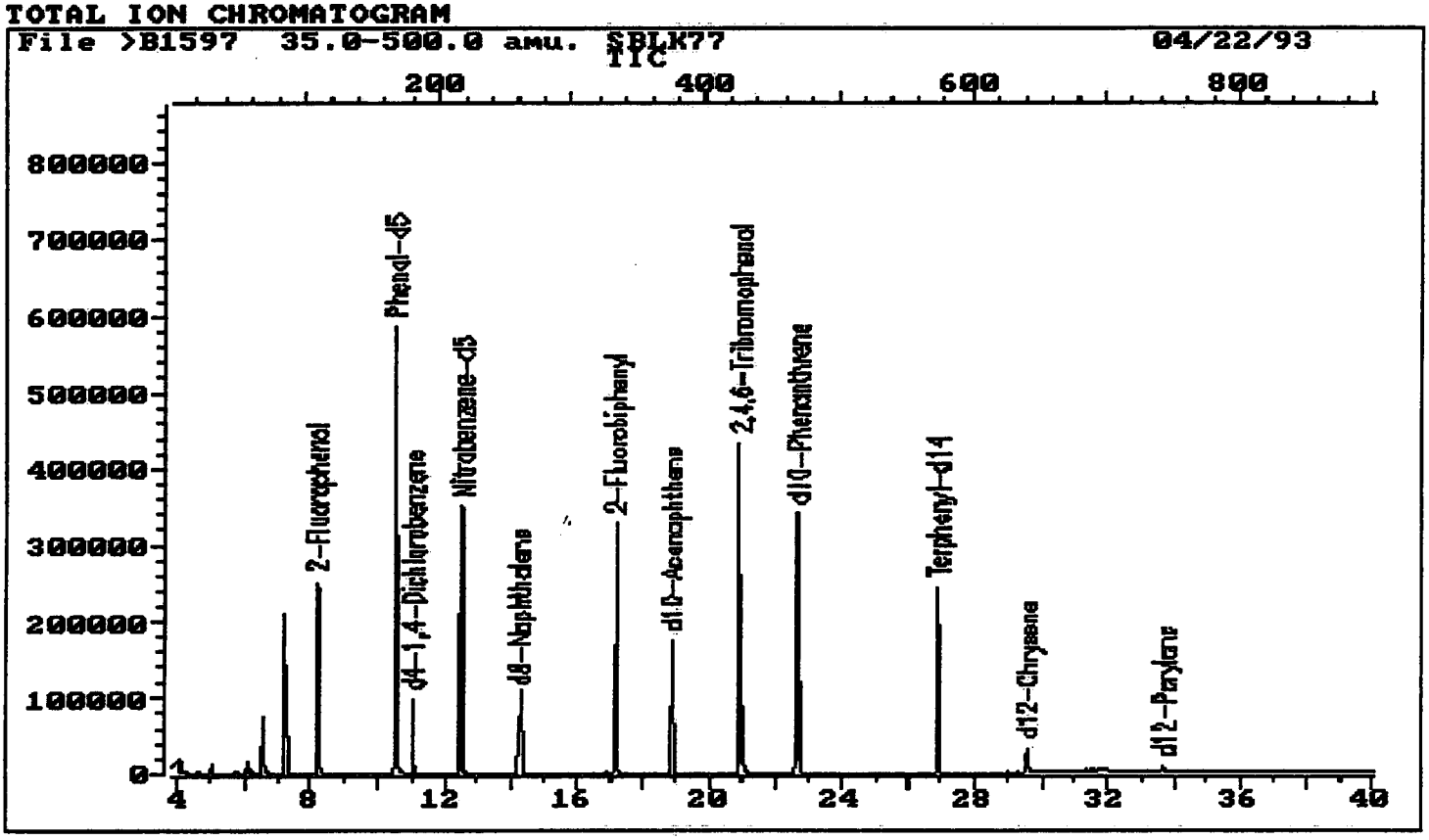
TOTAL ION CHROMATOGRAM



Data File: >B1597::G1 Quant Output File: ^B1597::QT
Name: SBLK77 Instrument ID: HP5970BB
Misc: 04/22/93 BTL# 1

Id File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04 Last Qcal Time: 930427 17:20

Operator ID: PAUL
Quant Time : 930428 13:09
Injected at: 930428 11:34

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QUANT REPORT

Operator ID: PAUL
Output File: ^B1599::QT
Data File: >B1599::G1
Name: 9302527
Misc: 2927 04/22/93 GES

Quant Rev: 7
Quant Time: 930428 13:54
Injected at: 930428 13:13
Dilution Factor: 1.00000
Instrument ID: HP5970BB
NL-5A BTL# 3

ID File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04
Last Qcal Time: 930427 17:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	11.05	181	54898	40.00	ug/l	93
4)	2-Fluorophenol	8.19	110	263677	91.19	ug/l	100
6)	Phenol-d5	10.53	168	424300	115.36	ug/l	84
19)	*d8-Naphthalene	14.27	261	205640	40.00	ug/l	93
20)	Nitrobenzene-d5	12.54	218	240959	54.54	ug/l	81
29)	Naphthalene	14.35	263	38865	8.95	ug/l	75
34)	*d10-Acenaphthene	18.85	375	129972	40.00	ug/l	93
39)	2-Fluorobiphenyl	17.16	333	432848	83.25	ug/l	93
54)	2,4,6-Tribromophenol	20.94	427	147997	121.07	ug/l	93
55)	*d10-Phenanthrene	22.67	470	330635	40.00	ug/l	100
67)	*d12-Chrysene	29.55	641	44957	40.00	ug/l	100
70)	Terphenyl-d14	26.89	575	362809	95.15	ug/l	86
76)	*d12-Perylene	33.69	744	11389	40.00	ug/l	100

* Compound is ISTD

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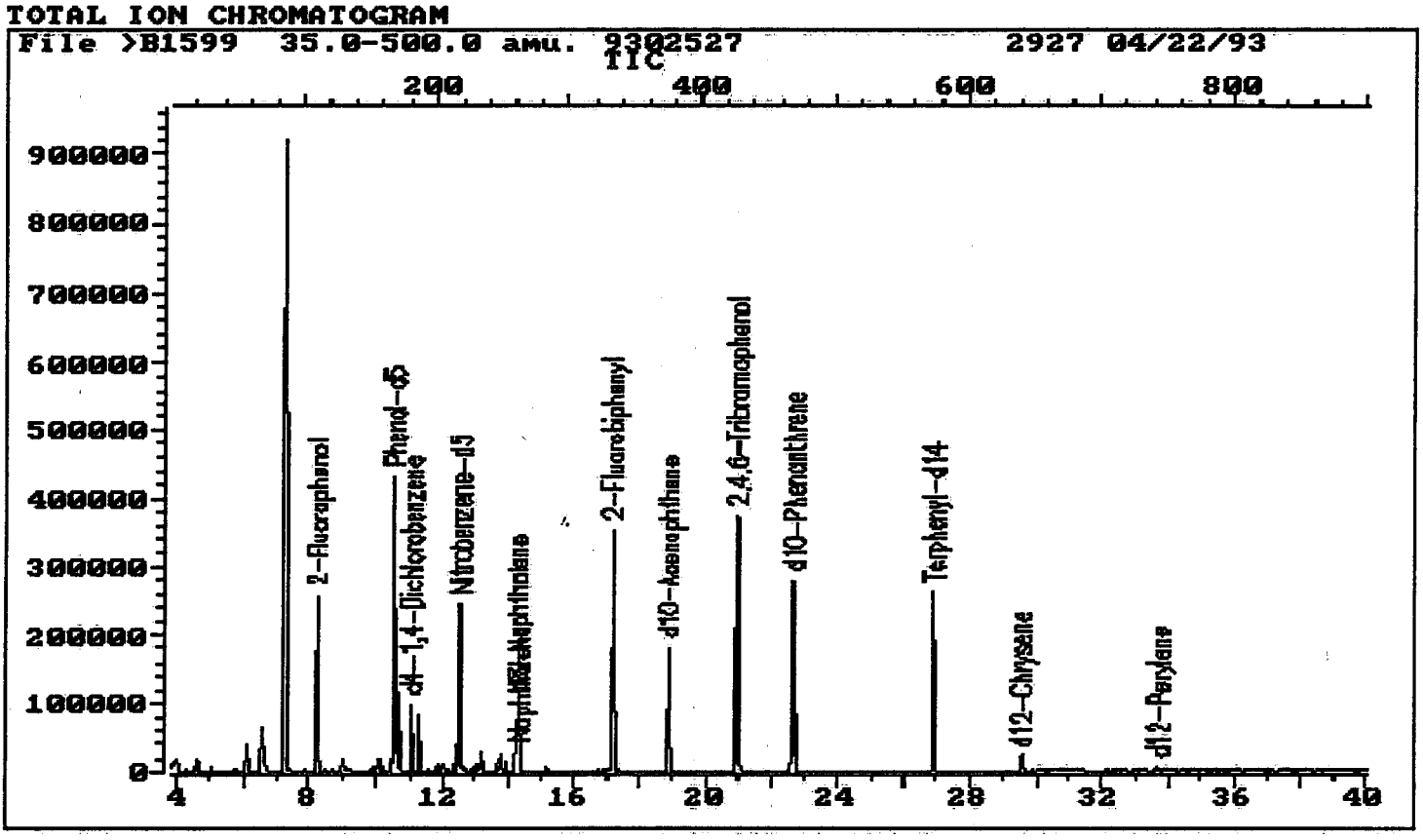
TOTAL ION CHROMATOGRAM



Data File: >B1599::G1 Quant Output File: ^B1599::QT
Name: 9302527 Instrument ID: HP5970BB
Misc: 2927 04/22/93 GES NL-5A BTL# 3

Id File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04 Last Qcal Time: 930427 17:20

Operator ID: PAUL
Quant Time : 930428 13:54
Injected at: 930428 13:13

84

Operator ID: PAUL
Output File: ^B1603::QT
Data File: >B1603::G1
Name: 9302528
Misc: 2927 04/22/93 GES

Quant Rev: 7
Quant Time: 930428 16:55
Injected at: 930428 16:17
Dilution Factor: 1.00000
Instrument ID: HP5970BB
NL-6 BTL#25

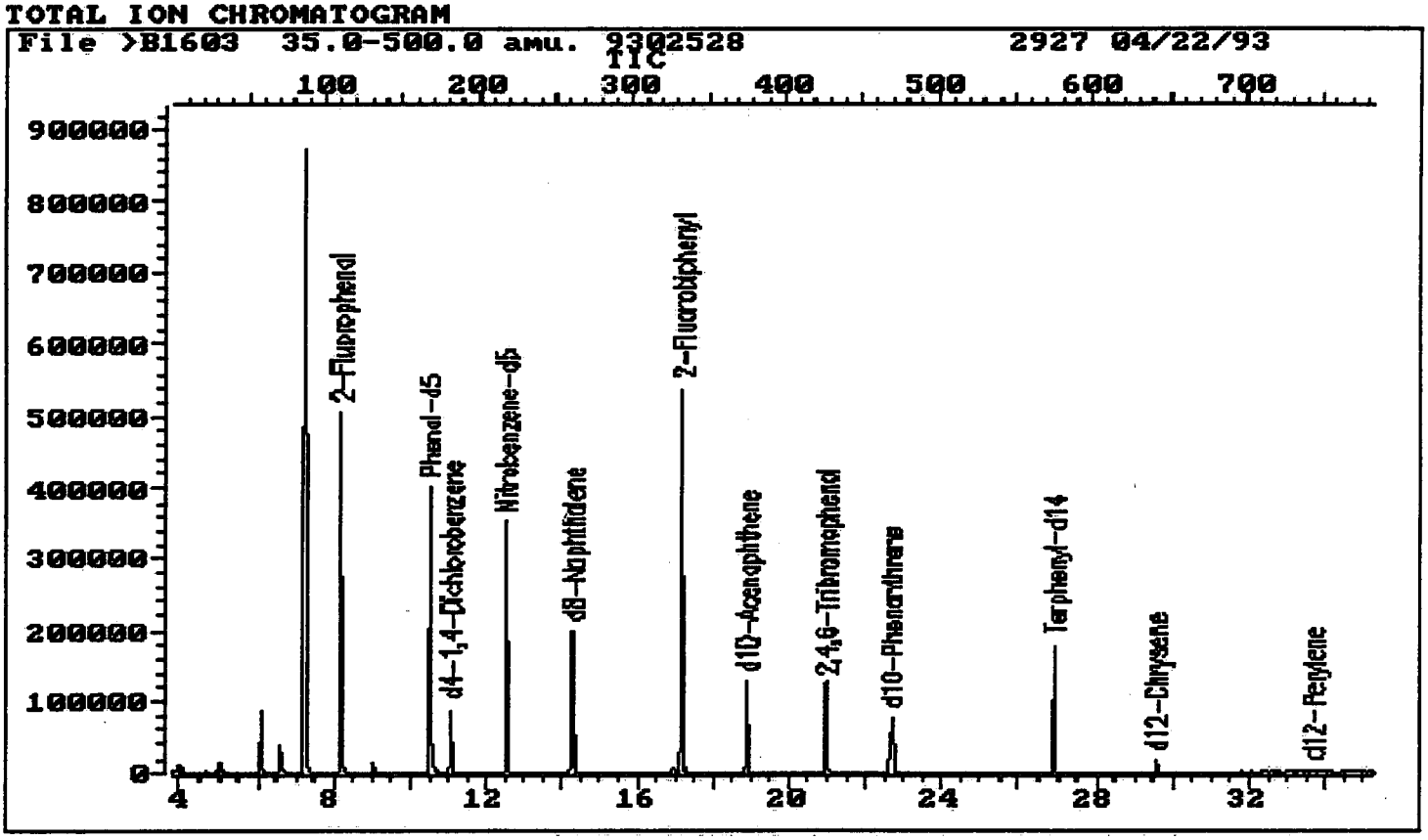
ID File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04
Last Qcal Time: 930427 17:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	11.08	182	43331	40.00	ug/l	91
4)	2-Fluorophenol	8.19	110	320320	140.35	ug/l	100
6)	Phenol-d5	10.52	168	452801	155.97	ug/l	74
19)	*d8-Naphthalene	14.30	262	232758	40.00	ug/l	98
20)	Nitrobenzene-d5	12.53	218	288099	57.61	ug/l	99
34)	*d10-Acenaphthene	18.88	376	74639	40.00	ug/l	96
39)	2-Fluorobiphenyl	17.19	334	467399	156.55	ug/l	96
54)	2,4,6-Tribromophenol	20.93	427	76012	108.28	ug/l	91
55)	*d10-Phenanthrene	22.66	470	156807	40.00	ug/l	100
67)	*d12-Chrysene	29.58	642	22761	40.00	ug/l	100
70)	Terphenyl-d14	26.92	576	205800	106.60	ug/l	94
76)	*d12-Perylene	33.68	744	8008	40.00	ug/l	100

* Compound is ISTD

85

TOTAL ION CHROMATOGRAM



Data File: >B1603::G1 Quant Output File: ^B1603::QT
Name: 9302528 Instrument ID: HP5970BB
Misc: 2927 04/22/93 GES NL-6 BTL#25

Id File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04 Last Qcal Time: 930427 17:20

Operator ID: PAUL
Quant Time : 930428 16:55
Injected at: 930428 16:17

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Operator ID: PAUL Quant Rev: 7 Quant Time: 930428 15:24
Output File: ^B1601::QT Injected at: 930428 14:47
Data File: >B1601::G1 Dilution Factor: 1.00000
Name: 9302529 Instrument ID: HP5970BB
Misc: 2927 04/22/93 GES NL-7 BTL# 5

ID File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04 Last Qcal Time: 930427 17:20

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	11.04	181	43664	40.00	ug/l	88
4)	2-Fluorophenol	8.19	110	280535	121.98	ug/l	100
6)	Phenol-d5	10.52	168	498783	170.50	ug/l	80
19)	*d8-Naphthalene	14.30	262	236988	40.00	ug/l	96
20)	Nitrobenzene-d5	12.53	218	330433	64.90	ug/l	94
34)	*d10-Acenaphthene	18.89	376	144504	40.00	ug/l	94
39)	2-Fluorobiphenyl	17.20	334	480232	83.08	ug/l	94
54)	2,4,6-Tribromophenol	20.94	427	149592	110.07	ug/l	97
55)	*d10-Phenanthrene	22.67	470	334888	40.00	ug/l	100
67)	*d12-Chrysene	29.58	642	26069	40.00	ug/l	100
70)	Terphenyl-d14	26.93	576	195542	88.44	ug/l	87
76)	*d12-Perylene	33.68	744	10346	40.00	ug/l	100

* Compound is ISTD

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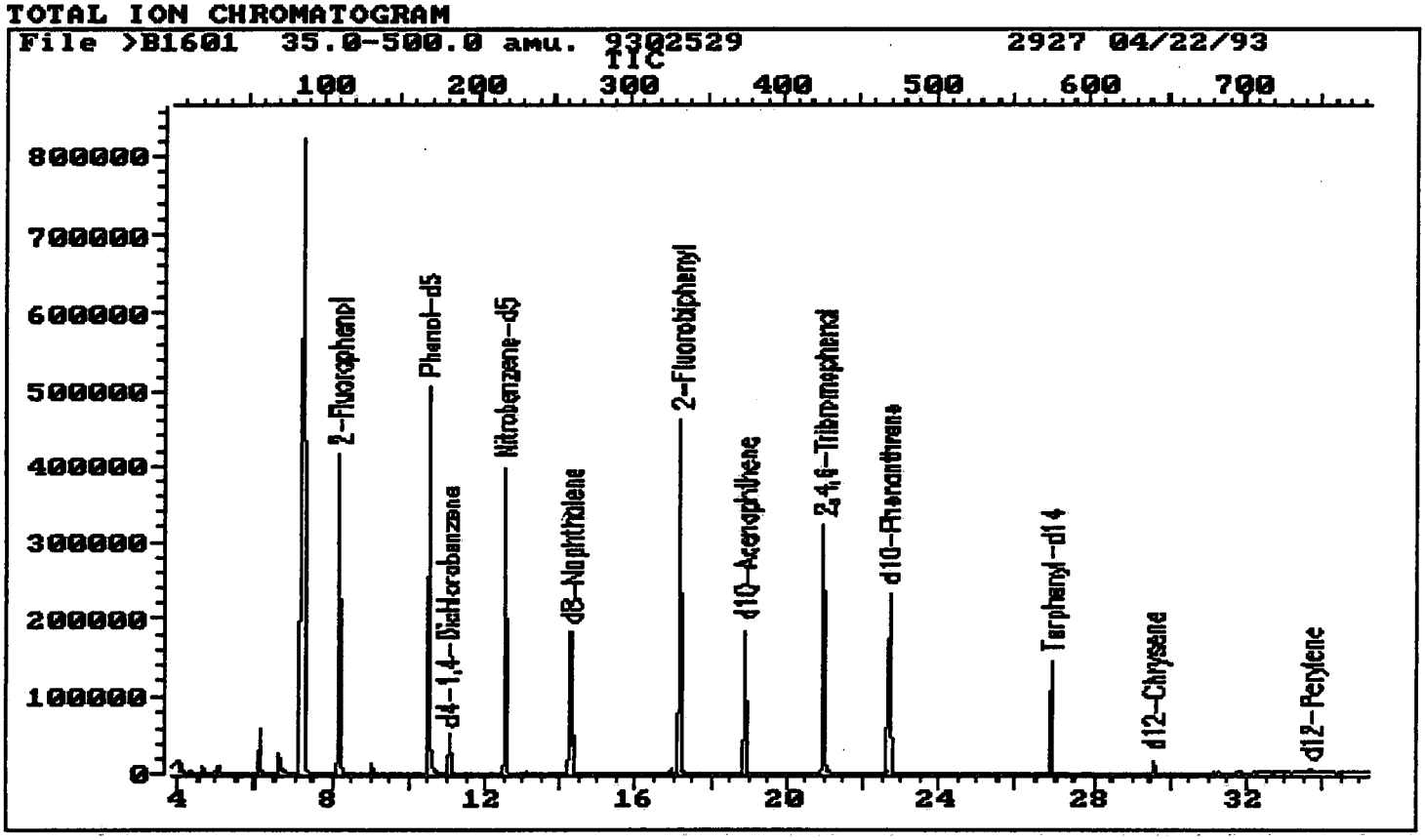
TOTAL ION CHROMATOGRAM

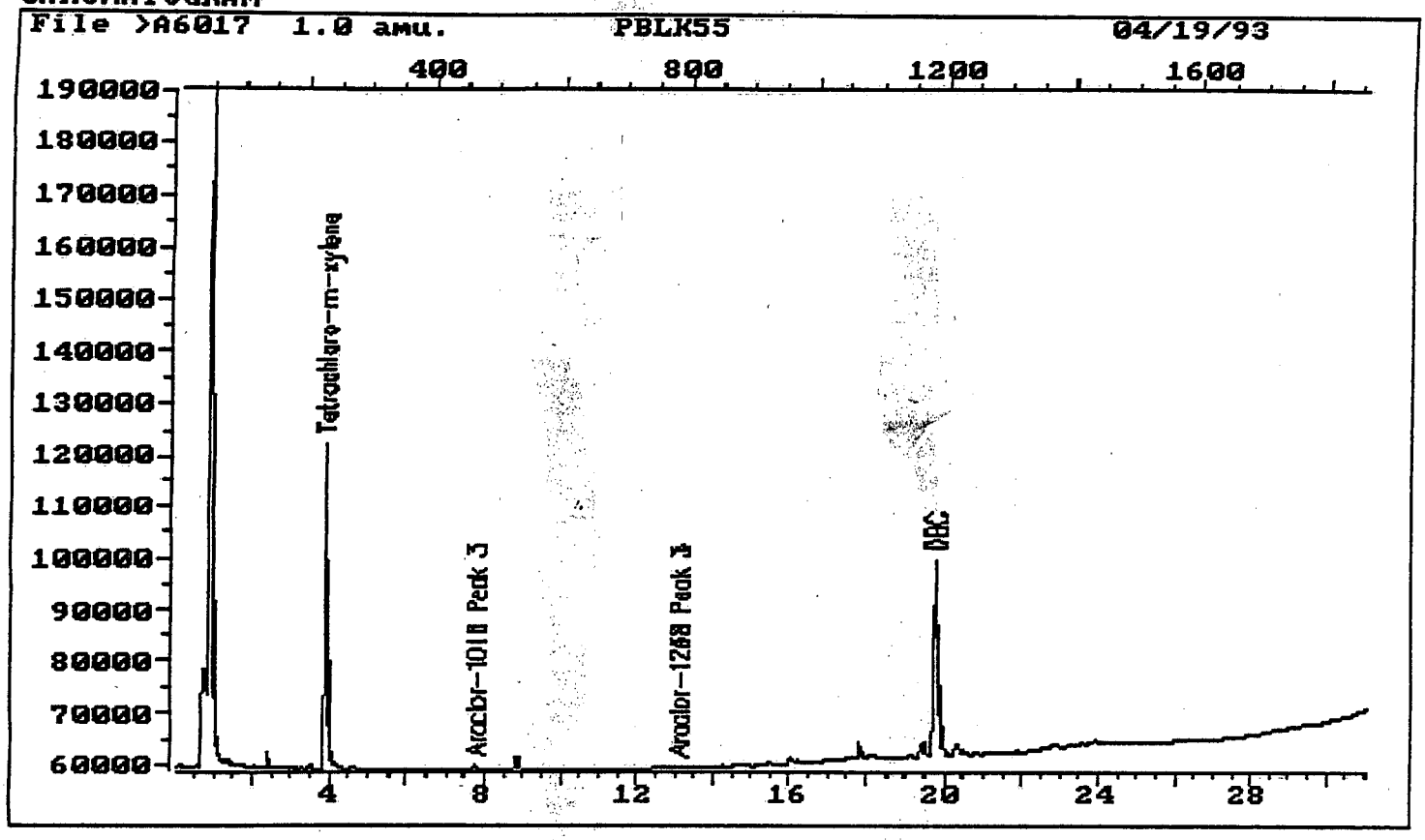


Data File: >B1601::G1 Quant Output File: ^B1601::QT
Name: 9302529 Instrument ID: HP5970BB
Misc: 2927 04/22/93 GES NL-7 BTL# 5

Id File: IDB12::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 930428 11:04 Last Qcal Time: 930427 17:20

Operator ID: PAUL
Quant Time : 930428 15:24
Injected at: 930428 14:47

CHROMATOGRAM



Data File: >A6017::AA
Name: PBLK55
Misc: 04/19/93

Quant Output File: ^A6017::QT
Instrument ID: A

Id File: ID1PCB::AA
Title: PCB'S HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 920720 10:37
Last Qcal Time: 930420 15:06

Operator ID: CLIFF
Quant Time : 930421 07:49
Injected at: 930420 18:38

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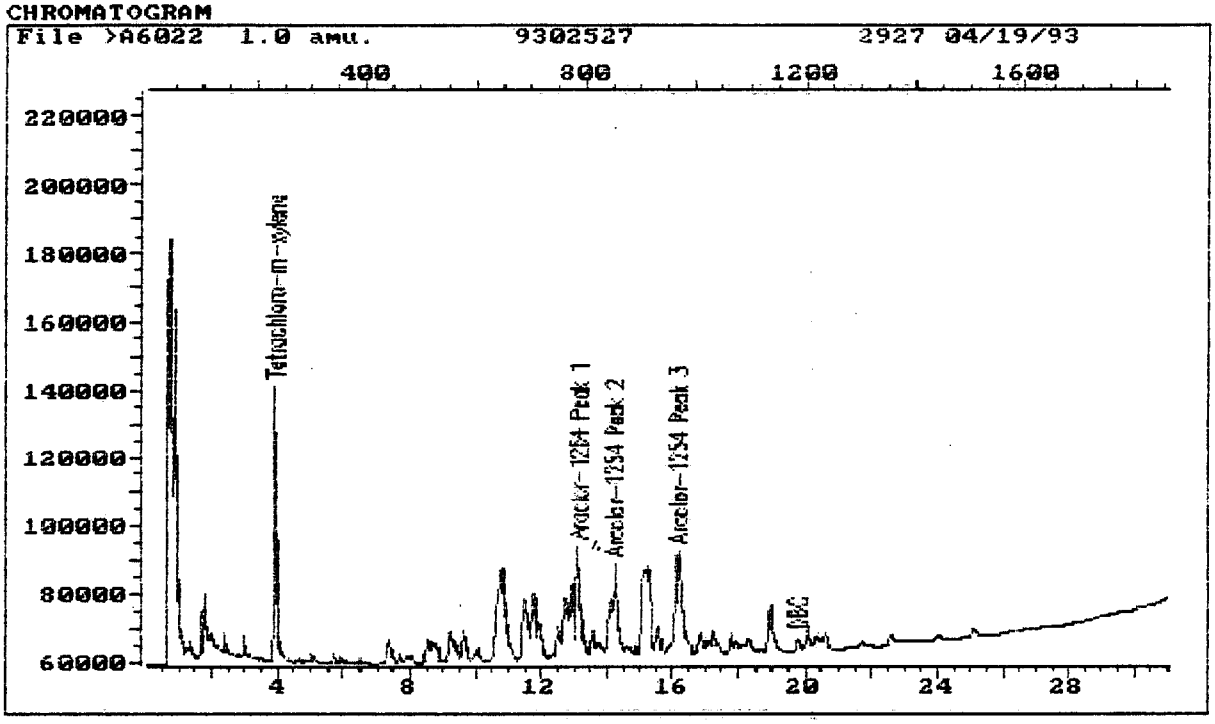
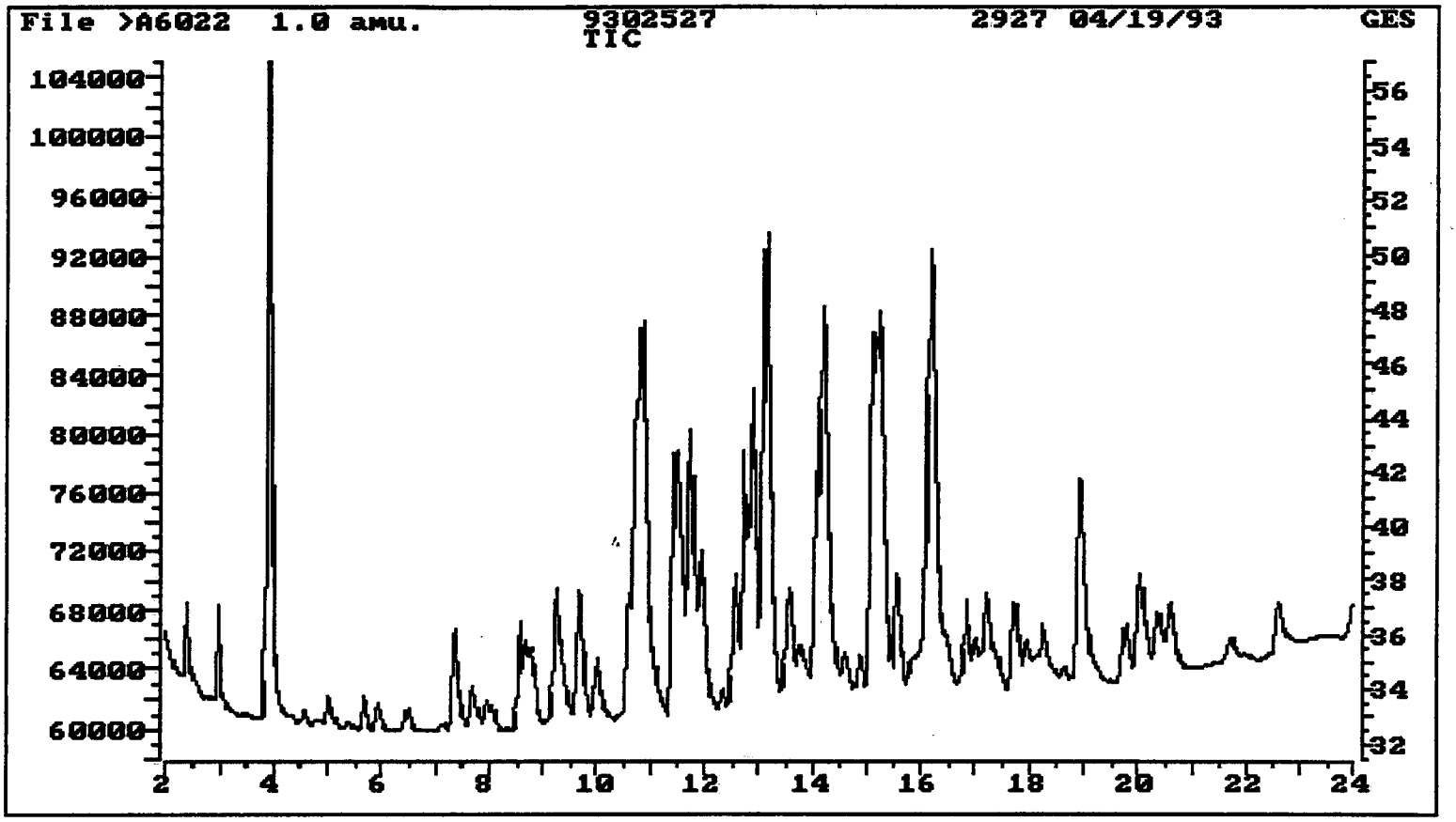
CHROMATOGRAM



Data File: >A6022::G1 Quant Output File: ^A6022::QT
Name: 9302527 Instrument ID: A
Misc: 2927 04/19/93 GES NL-5A

Id File: ID1PCB::AA
Title: PCB'S HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 920720 10:37 Last Qcal Time: 930420 15:06

Operator ID: CLIFF
Quant Time : 930421 07:53
Injected at: 930420 21:34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9302527
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2927 04/19/93
GES
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52
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44
42
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24

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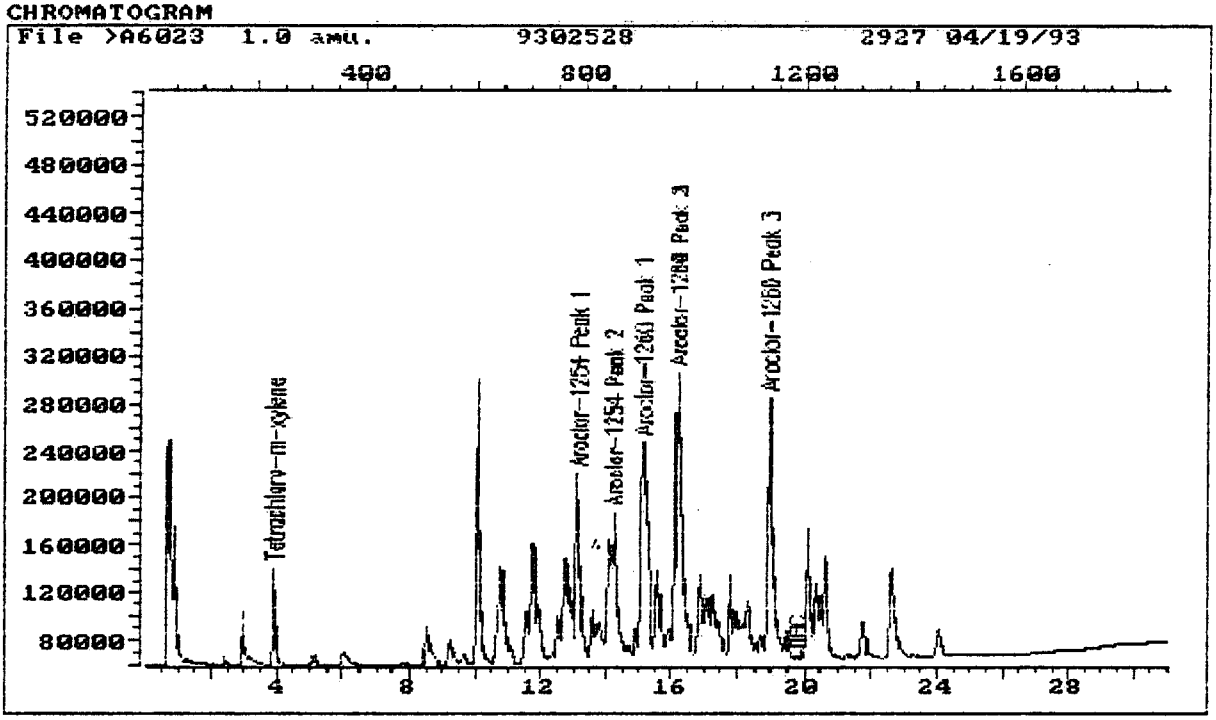
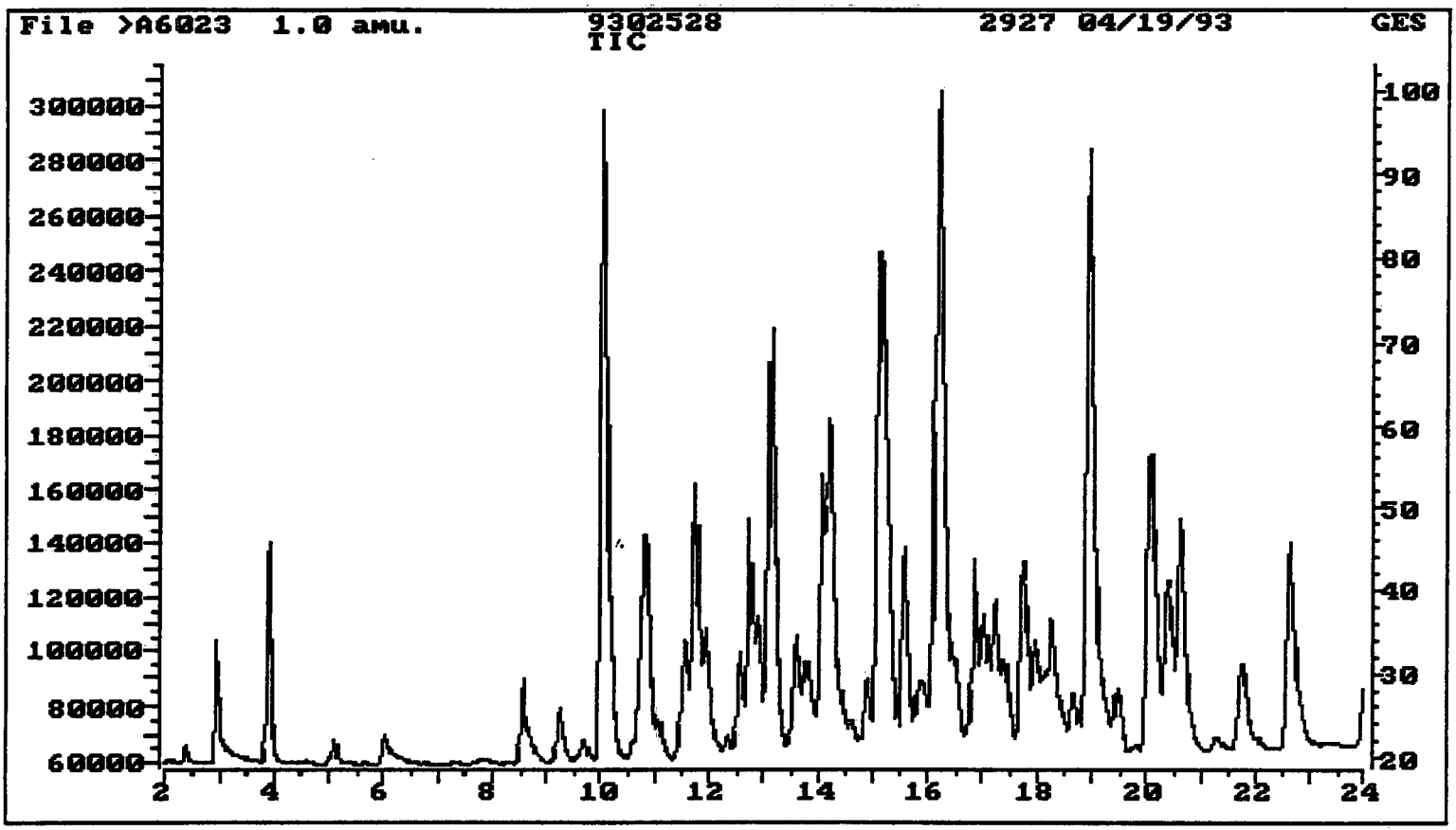
CHROMATOGRAM



Data File: >A6023::G1 Quant Output File: ^A6023::QT
Name: 9302528 Instrument ID: A
Misc: 2927 04/19/93 GES NL-6

Id File: ID1PCB::AA
Title: PCB'S HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 920720 10:37 Last Qcal Time: 930420 15:06

Operator ID: CLIFF
Quant Time : 930421 07:53
Injected at: 930420 22:09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9302528
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2927 04/19/93
GES
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260000
240000
220000
200000
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120000
100000
80000
60000
100
90
80
70
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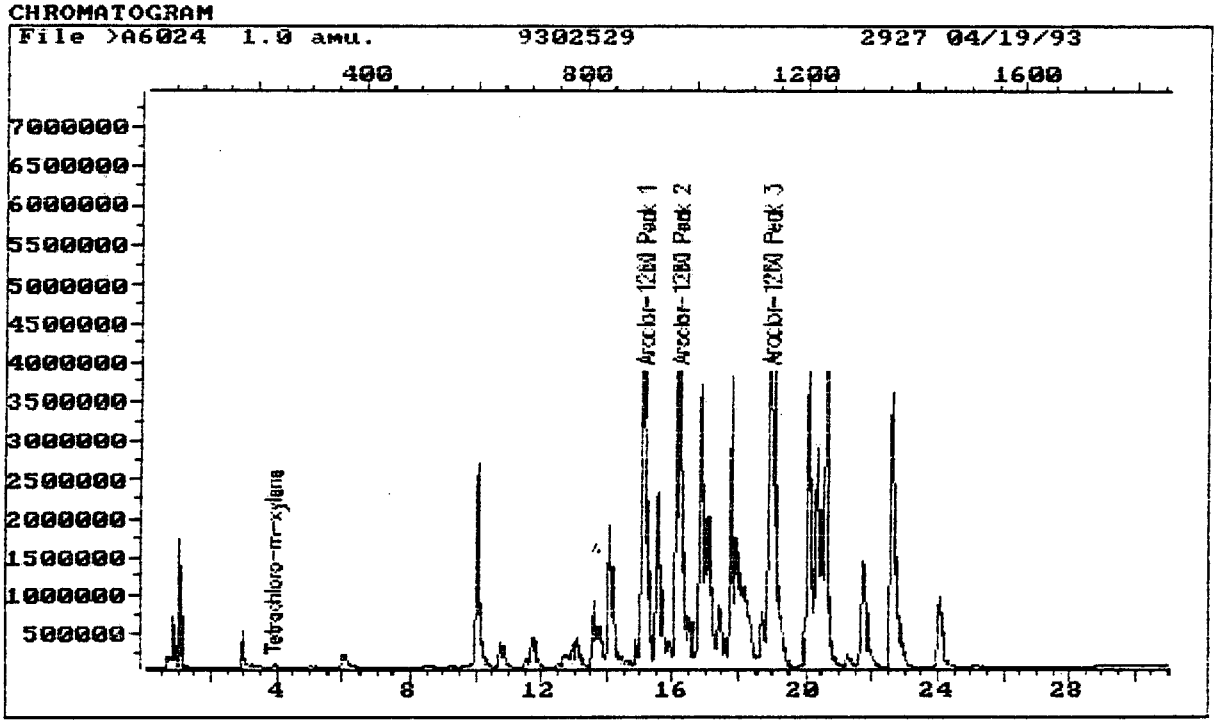
6
8
10
12
14
16
18
20
22
24

93

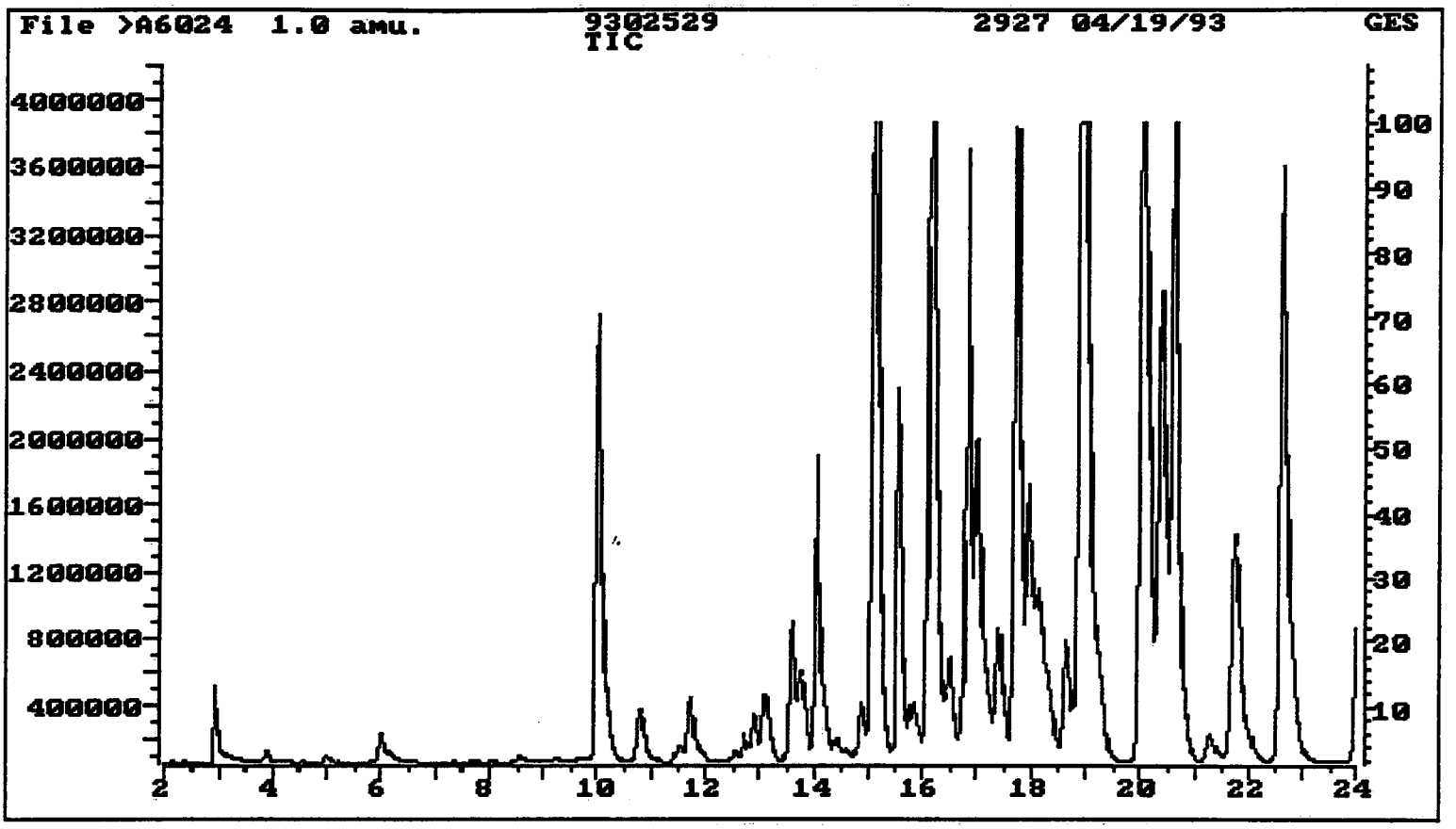
CHROMATOGRAM



Data File: >A6024::G1 Quant Output File: ^A6024::QT
Name: 9302529 Instrument ID: A
Misc: 2927 04/19/93 GES NL-7

Id File: ID1PCB::AA
Title: PCB'S HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 920720 10:37 Last Qcal Time: 930420 15:06

Operator ID: CLIFF
Quant Time : 930421 07:54
Injected at: 930420 22:45


File >A6024 1.0 amu.
9302529
TIC
2927 04/19/93
GES
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3200000
2800000
2400000
2000000
1600000
1200000
800000
400000
100
90
80
70
60
50
40
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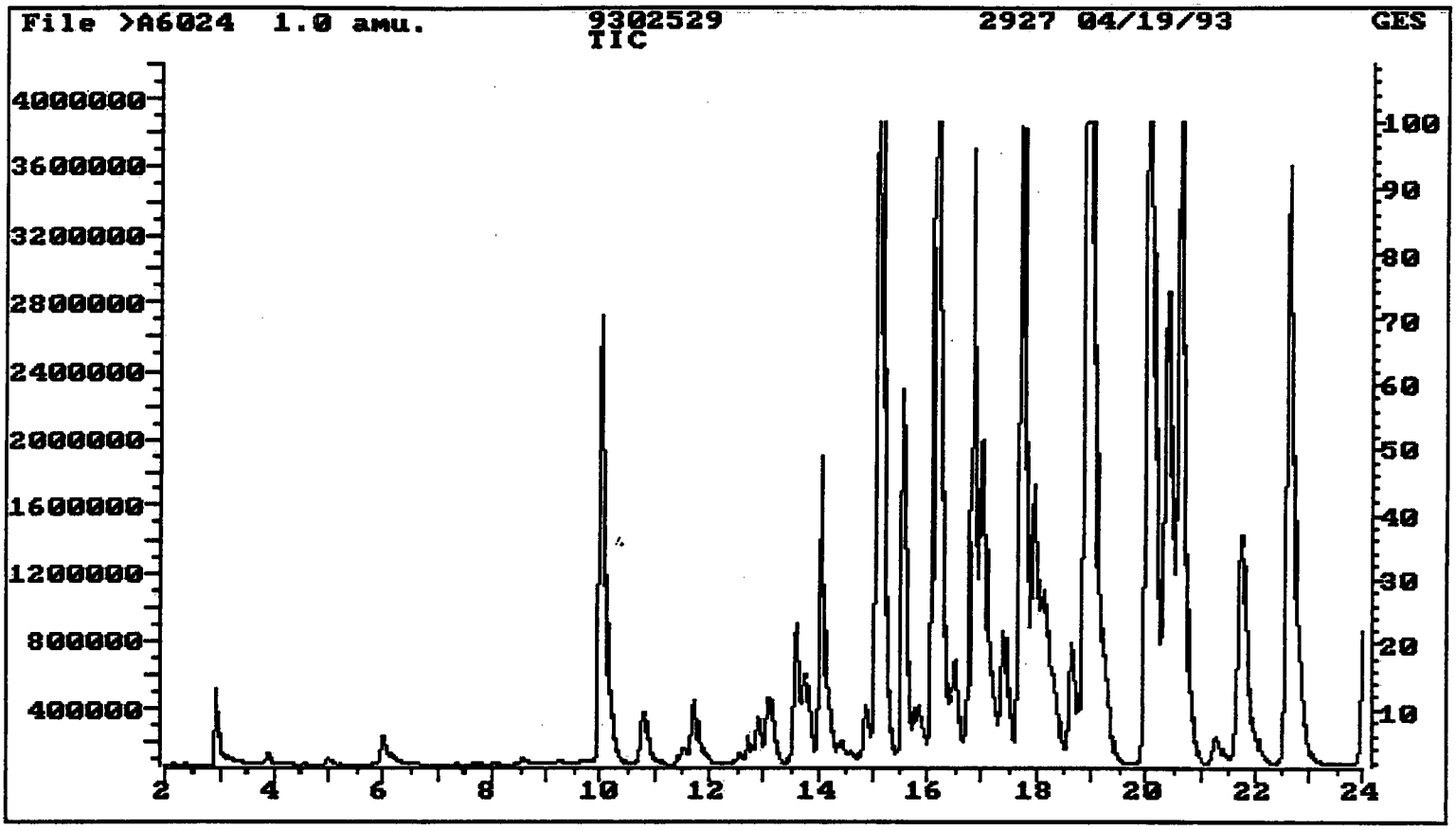
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Accredited Laboratories, Inc.
Foot of Pershing Avenue, P.O. Box 369
Carteret, New Jersey 07008-0369
Telephone: (908) 541-2025
A Subsidiary of **AMAX**

CHAIN OF CUSTODY FORM

Client: Guardian Env. Services
Address: 1280 Porter Rd
City: Bear
State, Zip: De, 19701

Project: NL/Dutch Boy
Contact: Jack Wilson
Phone: 442-0487
Fax: 442-0540

P.O. Number 29611

**M = Matrix (A)=Aqueous (S)=Soil (G)=Sludge (P)=Potable Water (O)=Oil (F)=Filter (K)=Solid (X)=Other

Deliverables (circle one): STD (Reduced) Regulatory ECRA CLP I CLP II
Tier II Data Package

* C = No. Containers

Turnaround: (if blank, std applies)

ALI Sample No.	Field ID	C*	M**	Date/Time SAMPLED	Sample Description	Analyses
9302527	NL-5A	2	K	4-12-93	Paint Residue	TCLP For Copper And
9302528	NL-6	2	K	4-12-93	Yellow Powder	Zinc only - TCLP
9302529	NL-7	2	K	4-12-93	Heavy Gray material	Volatile - TCLP Semi-
						Volatile - PCB - pH
						Flash Point - Total
						Cyanide - Reactive
						Sulfides (To be done
						on These 3 samples)

Person(s) Assuming Responsibility for Sampling: Print Ralph McVey Sign Ralph McVey

Relinquished By: print	Relinquished By: sign	Received By: print	Received By: sign	Organization	Date	Time	Reason
Jack Wilson	Jack Wilson	John Tetu	John Tetu	ALI	4/13/93	11:22	Analysis
John Tetu	John Tetu	D. Owen	D. Owen	ALI	4/13/93	11:38	Analysis

Comments: Fax Results To 442-0540 - Make 3 Hard copies and deliver To Job site (1050 State St, Perth Amboy)

ALI CASE NO. 2827

Date: 04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:45

ORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy

Date Sampled:04/12/93 Date Received:04/13/93 Report Package: Tier 2

Test: TCLP VOA QC#:_____

Test Description:TCLP Volatiles

By Method: _____

SAMPLE IDENTIFICATION			M	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#	t x	Date	Time	Init	Date	Time	Init	=
NL-5A	2927	9302527	K	4/20/93		OD	4/28/93	11:36	UP	
NL-6	2927	9302528	K				4/27/93	19:00		
NL-7	2927	9302529	K				4/28/93	12:13		

Reviewed by: MW Date: 4/28/93

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:01report

Date: 04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:44

ORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy

Date Sampled:04/12/93 Date Received:04/13/93 Report Package: Tier 2

Test: TCLP BNA QC#:_____
Test Description:TCLP Base Neutral Acid

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
NL-5A	2927	9302527	K	4-22-93		LM	4/28/93	13:13	PS	
NL-6	2927	9302528	K					16:17		
NL-7	2927	9302529	K					14:47		

Reviewed by: MIV Date: 4/28/93

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:01report

98

Date: 04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:45

ORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy

Date Sampled:04/12/93 Date Received:04/13/93 Report Package: Tier 2

Test: TCLP EXT ORG QC#:_____
Test Description:TCLP Extraction Organics

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
NL-5A	2927	9302527	K	4/20/93		OD	4/28/93		PS	
NL-6	2927	9302528	K							
NL-7	2927	9302529	K							

Reviewed by: MIV Date: 4/28/93

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:01report

Date: 04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:44

ORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy

Date Sampled:04/12/93 Date Received:04/13/93 Report Package: Tier 2

Test: PCB QC#:_____
Test Description:PCBs (PCB)

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
NL-5A	2927	9302527	K	4-19-93		[illegible]	4-20-93	21:34	[illegible]	
NL-6	2927	9302528	K					22:09		
NL-7	2927	9302529	K					22:45		

Reviewed by: MIV Date: 4/22/93

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:01report

100

Date:04/13/93 ACCREDITED LABORATORIES, INC. Time: 15:28:36

INORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Wanted: 04/26/93

Field#: NL-5A Case#: 2927 Sample#: 9302527

Client Sample Description: Paint Residue

Date Sampled: 04/12/93 Date Received: 04/13/93 Report Package: Tier 2

Test: MS TCLP QC#: 930162

Test Description: Metals Screen (MS)

Project Name: Nl/dutch Boy

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge:X=Oth

Sample Comments:

By Method:

						LABORATORY CHRONICLE PREPARATION		ANALYSIS		
MTX	ELEMENT	SYM	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
K	Copper	Cu				4/24/93	TH	4/26/93	SMB	363-100
K	Zinc	Zn				↓	↓	↓	↓	↓
		WC								

Quality control Report Number(s): 930424T

Reviewed by: WC Date: 4/27/93 RPT:02report

101

Date:04/13/93 ACCREDITED LABORATORIES, INC. Time: 15:28:36

INORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Wanted: 04/26/93

Field#: NL-6 Case#: 2927 Sample#: 9302528

Client Sample Description: Yellow Powder

Date Sampled: 04/12/93 Date Received: 04/13/93 Report Package: Tier 2

Test: MS XCL QC#: 930162

Test Description: Metals Screen (MS)

Project Name: Nl/dutch Boy

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge:X=Oth

Sample Comments:

By Method: _____

						LABORATORY CHRONICLE PREPARATION		ANALYSIS		
MTX	ELEMENT	SYM	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
K	Copper	Cu				4/24/93	TH	4/26/93	SAMB	363-100
K	Zinc	Zn				↓	↓	↓	↓	↓
		JC								

Quality control Report Number(s): 930424T

Reviewed by: JC Date: 4/27/93 RPT:02report

102

Date:04/13/93 ACCREDITED LABORATORIES, INC. Time: 15:28:37

INORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Wanted: 04/26/93

Field#: NL-7 Case#: 2927 Sample#: 9302529

Client Sample Description: Heavy Gray Material

Date Sampled: 04/12/93 Date Received: 04/13/93 Report Package: Tier 2

Test: MS TCLP QC#: 930162

Test Description: Metals Screen (MS)

Project Name: Nl/dutch Boy

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge:X=Oth

Sample Comments:

By Method:

						LABORATORY CHRONICLE PREPARATION		ANALYSIS		
MTX	ELEMENT	SYM	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
K	Copper	Cu				4/24/93	TH	4/26/93	SAMB	363-100
K	Zinc	Zn				↓	↓	↓	↓	↓
		WC								

Quality control Report Number(s): 030424T

Reviewed by: WC Date: 4/27/93 RPT:02report

103

Date: 04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:44

ORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy

Date Sampled:04/12/93 Date Received:04/13/93 Report Package: Tier 2

Test: TCLP EXT MET QC#:_____
Test Description:TCLP Extraction Metals

By Method: _____

SAMPLE IDENTIFICATION			M	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#	t x	Date	Time	Init	Date	Time	Init	
NL-5A	2927	9302527	K	4/20/93		DD				
NL-6	2927	9302528	K							
NL-7	2927	9302529	K							

Reviewed by: WC Date: 4/27/93

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:01report

104

Date:04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:46

INORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy Case #: 2927

Date Sampled: 04/12/93 Date Received: 04/13/93 Report Pkg: Tier 2

Test: CN Sample Matrix: K
Test Description:Cyanide, Total (CN)

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid By Method: _____
:F=Filters:P=Potable Water:G=Sludge:X=Other

SAMPLE IDENTIFICATION		ANALYTICAL DATA			LABORATORY CHRONICLE PREPARATION		ANALYSIS		
Field#	Sample#	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
NL-5A	9302527	ND	.25	mg/Kg	4/14/93	APZ	4/16/93	US	381-2
NL-6	9302528	ND	.22	↓	↓	↓	↓	↓	↓
NL-7	9302529	ND	.23	↓	↓	↓	↓	↓	↓

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QUALITY CONTROL: 930330CN Method Blank : <0.20
Percent Spike Recovery : 77.6
Relative Percent Difference of Duplicate Samples : 0.00

Reviewed by: Am Date: 4/20/93 RPT:05REPORT

105

Date:04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:48

INORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy Case #: 2927

Date Sampled: 04/12/93 Date Received: 04/13/93 Report Pkg: Tier 2

Test: RS Sample Matrix: K
Test Description:Sulfide, Reactive (RS)

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid By Method: _____
:F=Filters:P=Potable Water:G=Sludge:X=Other

SAMPLE IDENTIFICATION		ANALYTICAL DATA			LABORATORY CHRONICLE PREPARATION		ANALYSIS		
Field#	Sample#	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
NL-5A	9302527	ND	50.2	mg/kg	4/15/93	CS	4/19/93	CS	381-2
NL-6	9302528	ND	44.9	↓	↓	↓	↓	↓	↓
NL-7	9302529	ND	45.5	↓	↓	↓	↓	↓	↓

QUALITY CONTROL: 930413RS Method Blank : <40
Percent Spike Recovery : _____
Relative Percent Difference of Duplicate Samples : 0.00

Reviewed by: [illegible] Date: 4/20/93 RPT:05REPORT

106

Date:04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:47

INORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy Case #: 2927

Date Sampled: 04/12/93 Date Received: 04/13/93 Report Pkg: Tier 2

Test: FP Sample Matrix: K
Test Description:Flash Point (FP)

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid By Method: _____
:F=Filters:P=Potable Water:G=Sludge:X=Other

SAMPLE IDENTIFICATION		ANALYTICAL DATA			LABORATORY CHRONICLE PREPARATION		ANALYSIS		
Field#	Sample#	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
NL-5A	9302527	161	80	°F			4/16/93	D.M.	#379 P-1
NL-6	9302528	>200	80	°F			4/16/93	D.M.	#379 P-1
NL-7	9302529	>200	80	°F			4/16/93	D.M.	#379 P-1

QUALITY CONTROL: 9302530 Method Blank : _____
Percent Spike Recovery : _____
Relative Percent Difference of Duplicate Samples : 0.00

Reviewed by: K. CHALOKA Date: 4/16/93 RPT:05REPORT

107

Date:04/13/93 ACCREDITED LABORATORIES, INC. Time:15:28:47

INORGANIC ANALYSIS LABORATORY CHRONICLE

Client: Guardian Environmental Service Test Date Due: 04/26/93

Client Project Name: Nl/dutch Boy Case #: 2927

Date Sampled: 04/12/93 Date Received: 04/13/93 Report Pkg: Tier 2

Test: PH Sample Matrix: K
Test Description:PH

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid By Method: _____
:F=Filters:P=Potable Water:G=Sludge:X=Other

SAMPLE IDENTIFICATION		ANALYTICAL DATA			LABORATORY CHRONICLE PREPARATION		ANALYSIS		
Field#	Sample#	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
NL-5A	9302527	7.52	0.05	SU			4-14-93	BO	340-4
NL-6	9302528	7.19							
NL-7	9302529	7.44							

QUALITY CONTROL: _____ Method Blank : _____
Percent Spike Recovery : _____
Relative Percent Difference of Duplicate Samples : _____

Reviewed by: KB Date: 4/15/93 RPT:05REPORT

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